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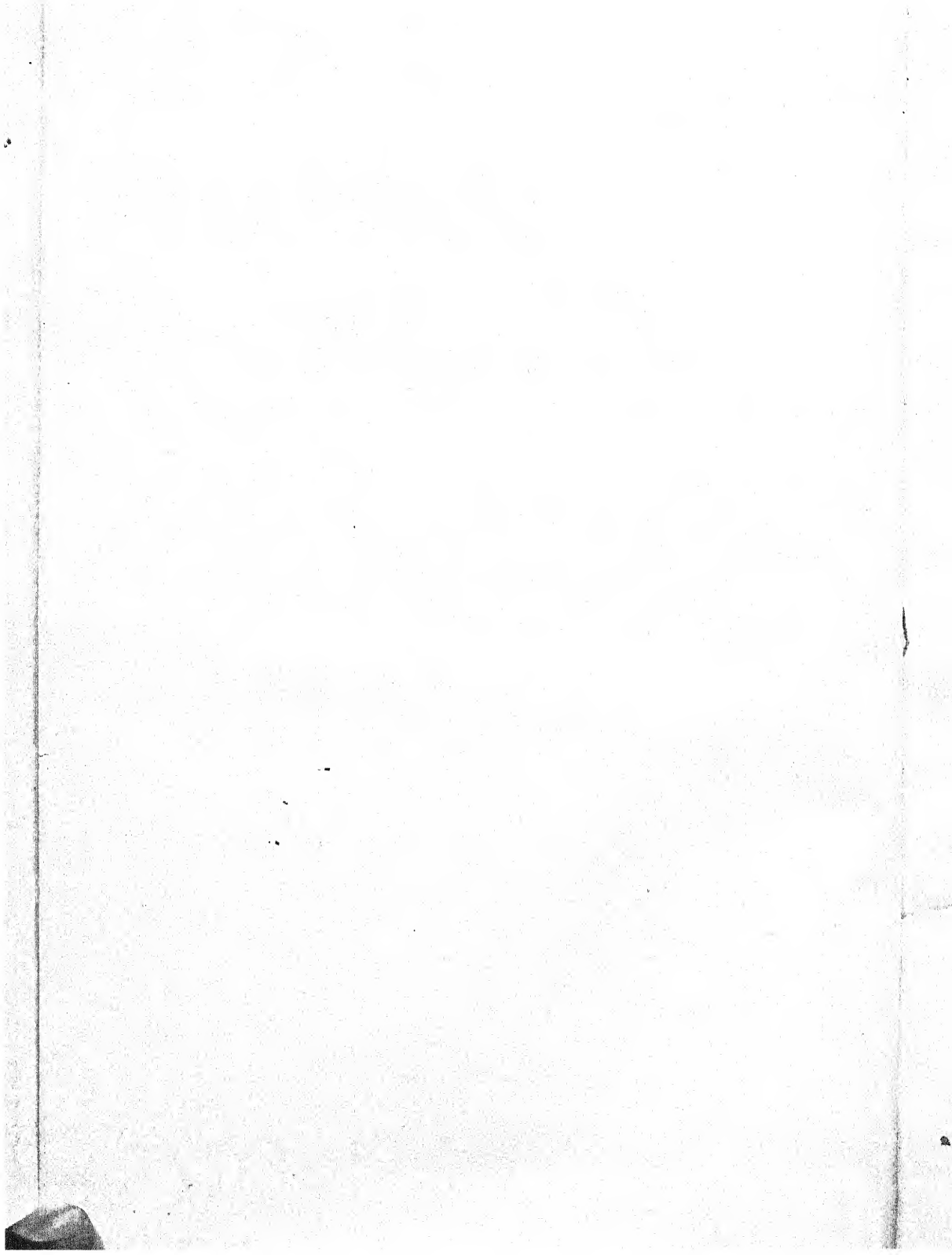
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THE WAR IN TURKUMANIA:

SKOBELEFF'S CAMPAIGN OF 1880-81.

BY

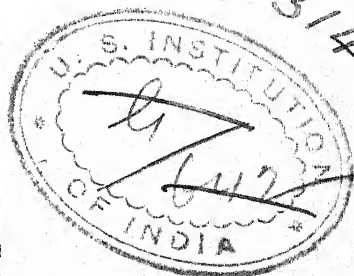
MAJOR-GENERAL N. I. GRODEKOFF,
OF THE IMPERIAL RUSSIAN ARMY.

VOL. III.

Translated from the Russian

BY

LIEUTENANT J. M. GRIERSON, R.A.



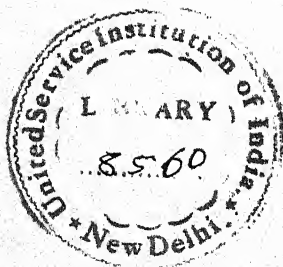
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THE WAR IN TURKUMANIA:

SKOBELEFF'S CAMPAIGN OF 1880-81.

CHAPTER XII.

Proposals of the Commander of the Expedition respecting further operations for the subjugation of the *oasis*—Collection of supplies at Bámi—Mobile batteries—Activity on the Atrak line—Provisioning of the Atrak line up to the 1st (13th) July 1881—State of affairs in Akhál during September and October 1880—Transport of troops from the Caucasus to Trans-Caspia—Changes in the plan of the campaign—Fresh distribution of troops—Concentration of the attacking force at Bámi—The Railway—State of affairs in Akhál up to the 1st (13th) December 1880.

BEFORE leaving Bámi on the 21st August (2nd September), the Commander of the Expedition gathered the officers of the garrison of that place together, and told them that the period of inactivity at Bámi would soon come to an end, and that the date of the commencement of active operations against Gok-Tapa had been more or less fixed.

General Skobelev's proposals for the conduct of the Akhál-Tekke Expedition, as presented by him to the Commander-in-Chief of the Army of the Caucasus on the 7th (19th) March at St. Petersburg, applied only to the period up to the 1st (13th) July, by which date a point at the edge of the *oasis* was to be occupied, and the collection of supplies at that place begun. This had now been done, although at a later date than was originally intended, and the opinion expressed at St. Petersburg that by the occupation of such a point our influence would be extended to Durun had been fully justified.

The periodical alarm amongst the enemy, and our advance in July to the very walls of Gok-Tapa, had caused the Tekkes to shut themselves up in their stronghold, of which they were weary, and where they were beginning to suffer.

At the same time the collection of supplies at Bámi, first by along the Atrak, and afterwards by the Micháelovsk line, had begun; and although the strength of our transport at the end of August had not reached its *maximum*, it could now be assumed with certainty that the camels ordered at Orenburg would be forthcoming, and the date even of their arrival could be fixed. The advance on Gok-Tapa had now, therefore, become a more tangible reality, and General Skobelev could at last see a prospect of his exertions being crowned with success.

By putting together the carrying power of the camels and the number of journeys they would make, the date by which a quantity of supplies sufficient to justify a further advance would be gathered at Bámi could be approximately fixed. Circumstances might, of course, cause considerable changes to be made in these calculations; but, such as they were, they would serve as a basis for our further plans.

These plans, as worked out in September, were as follows:—

In the middle of September there were already 12,800 cwt. of provisions at Bámi. General Skobelev proposed to advance to the Karagán stream with a small force, build there a fort (Opornoye), and store in it two-months' supplies for the Field Force, *i.e.*, for the troops who were to besiege Gok-Tapa, and occupy the fortified points in the *oasis*; in all 8,000 men and 4,000 horses.

This Force required per month 8,000 cwt. of provisions and 7,360 cwt. of forage.

To form this supply at Opornoye, there was at Bámi a sufficiency of rations so far, but there was no forage. If, however, we succeeded in occupying Opornoye by the beginning of October, the horses could temporarily be fed from local resources, *i.e.*, on maize (*júgára*). On the other hand, if Opornoye were not occupied at once, the enemy would cut the crops, and the advance would have to be put off till the arrival of a supply of forage from the rear. The work of carrying supplies forward to form a *dépôt* at Opornoye and of refilling the Bámi *dépôts* had to be performed by camels; and of those at the time the plan was worked out, *i.e.*, in the middle of September, we had about 6,000 on the Micháelovsk line. By the 1st (13th) October 2,000 Orenburg camels, and by the 15th (27th) the remaining 2,000, were to arrive. In the beginning of November part of the camels could make two trips to Bámi and part one only, which would give in all 25,600 cwt. of provisions and 14,400 cwt. of oats. Thus, by the beginning of November, there would be gathered at Bámi and Opornoye 38,400 cwt. of provisions and 14,400 cwt. of oats, *i.e.*, 5 months' supply for 8,000 men and 2 months' for 4,000 horses.

In order to have this two-months' supply transported to Opornoye as soon as possible, General Skobelev proposed, if no unforeseen events occurred, to move up all the supplies from the Bámi *dépôt* and part of those at Duz-Olum to the Karagán stream, directly sufficient transport was available at Bámi. For this purpose there were expected 40 new army waggons, 20 of which had been despatched in the beginning of August; the remainder had been asked for by General Skobelev in September, and were expected to arrive at Chikishliar in the beginning of October. Officers had also been detailed in September to buy 80 new waggons in the Caucasus, and the troops had 50 waggons; therefore there would be available in all 170 waggons with a total carrying power of 2,720 cwt.

On the basis of these calculations, it was therefore determined to detail from the Advanced Force a column of 500 bayonets, 200 sabres, and 15 guns for garrison service with 200 gunners,—in all, including *jigits* and non-combatants, 1,000 men and 400 horses,—to form the Opornoye post on the Karagán stream. This detachment rendered a reinforcement of the force in Trans-Caspia necessary, and it was decided to call up one battalion of the 19th Infantry Division. The transport to Trans-Caspia of the other troops of this division, all arrangements for which had been made on the west coast of the Caspian, depended entirely on the success of the measures taken to concentrate supplies at Bámi and Opornoye. It was calculated that 54,400 cwt. could be

transported to Bámi and Opornoye by the beginning of November.* By this time also the troops destined to operate against Gok-Tapa would also be concentrated at Bámi and Duz-Olum, from which places it was proposed to advance in two columns. Consequently the transport of troops from the Caucasus ought to be commenced in the beginning of October.

Once concentrated, the decisive advance was to be immediately undertaken by the troops. There were three reasons for this: firstly, to avoid a useless consumption of the supplies gathered by such exertions and at such a cost at a great distance from the sea; secondly, because, if any further delay were made, the troops destined to move through the hilly country from Duz-Olum would meet with considerable opposition from the hillmen; and thirdly, because, if we ourselves did not occupy the different points before the beginning of the rains, the enemy would assuredly do so, and thus we could only keep the initiative already gained by commencing operations before the breaking of the rains.

All these calculations were made without taking into consideration any help that might be rendered by Persia; but if Colonel Grodekoff, who had been sent into that country, could succeed in gathering a two-months' supply of provisions, or even less, on the flank of the line of operations, *e.g.*, at Garm-Ab, not only would the position of the army before Gok-Tapa be much more secure, but it would even be possible, directly that fortress was taken, to base ourselves temporarily on Persia, and thus shorten the total duration of the Expedition and diminish the expenditure.

It was proposed to have not fewer than 5,000 bayonets with the Advanced Force, as out of this number 260 would have to be left at Bámi, at least two mobilized companies (260 bayonets) at Opornoye, and three such companies (430 bayonets) at Yegyán-Bátir-Kala. The Commander of the Expedition had, however, at his disposal only 4,650 bayonets in consequence of the necessary detachments on the lines of communication, and had besides determined that the troops of the 21st Division and the local troops should take part in the active operations; the former because they had borne all the labour of the preliminary operations, and the latter because it was of importance to accustom them, as the possible nucleus of a future permanent Trans-Caspian Force, to steppe warfare. To make up the required number of bayonets, General Skobeleff, therefore, proposed to call up another company of 100 men from the Alexandrovsk Local Detachment, and to call for volunteers from the companies of the 19th Infantry Division, thus giving in all 450 men more, and bringing his total force up to 5,100 bayonets, which, after detaching 950 to Bámi, Opornoye, and Yegyán-Bátir-Kala, would leave him 4,150 bayonets for active operations.

Of cavalry there were in the district 6 *sotnias* of the Taman, 4 of the Poltava, and 2 of the Lába Regiment. Besides these, two squadrons of Dragoons had been detailed for service in Trans-Caspia, and permission had been given to detain three *sotnias* of the 5th Orenburg Regiment, thus giving in all 17 *sotnias* and squadrons. Of these, it was proposed to employ 7 on the lines of communication, leaving 10 for active operations—a number which was deemed amply sufficient.

As regards artillery, General Skobeleff counted on having, by the time fixed for the advance, 20 mortars, 12 mountain and 80 field guns,—in

* See Appendix LIX.—Project for the movement of transport with supplies from Krásnovodsk and Mulla-Kári to Bami between the 21st September (3rd October) and 8th (20th) November 1880.

Oats were to be carried up by Gromoff's hired transport (1,200 camels) from Duz-Olum. These would arrive at Bami on the 20th September (2nd October), and would at once begin work so as to have 12,800 cwt. carried to Bámi in four trips by the 1st (13th) November.—*Author.*

all 112 pieces. Thus the total strength of the force for active operations was :—

			Men.	Horses.
Infantry	...	...	4,150	600
Cavalry	...	...	1,000	1,200
Artillery	...	...	1,200	1,200
Non-combatants	...	...	200	...
<i>Figils</i>	...	...	200	500
Camel-drivers	...	...	800	..
Total	...	...	7,550	3,500

It was proposed to divide this force into two columns—a main body and a flanking force. The main column, provided with supplies for men and horses for 21 days, and basing itself on the two-months' supply at Opornoye, was to move from Bámi on Durun and Yegyán-Bátir-Kala. To it were to be assigned 4,000 camels. The flanking column was to march from Duz-Olum up the river Chandir, and by mountain paths to Doidukh, near the pass leading to the Tekke settlement of Báb-Aráb. The objects of the flanking column were :—

- (1) To reconnoitre and map out the country so as to have at the end of the Expedition some data to go upon to settle the important Imperial question as to the possession of territory as far as the Atrak and the Persian frontier.
- (2) To cover the march of the main column as it would be exposed to hostile attacks in flank.
- (3) To threaten Askhábád.
- (4) In case of the retreat of the enemy from Gok-Tapa, to form the advanced guard of the force.
- (5) In the event of the enemy concentrating at Gok-Tapa, to cut his line of retreat on Askhábád and gather in all the supplies round Báb-Aráb.
- (6) To cover our communications with Persia and the transport of supplies from that country.

This flanking column was composed of :—

6 non-mobilized companies	...	...	500 bayonets,
$\frac{1}{2}$ company of Sappers	...	...	75 „
2 <i>sotnias</i> of Cossacks	...	...	200 sabres,
8 mountain guns with	...	...	200 gunners,

in all 1,100 men and 400 horses. This column was to march as lightly as possible, and was to have with it biscuit, groats, tea, sugar, salt, oats, and slaughter cattle for ten days. Of these stores, four days' supply was to be carried by the men, and the rest on pack animals.* This column was to start in the beginning of November, so as to be on a level with Nukhur by the 5th (17th),

* The amount of transport required was as follows :—

		Cwt.	Horses.
6 days' supply of biscuit	...	172·8	108
„ „ tea and sugar	...	8	5
„ „ salt	...	3·84	2
„ „ oats	...	263	165
<i>Tentes d'abri</i> and medical stores	...	32	20
Total	...	481·64	300

or, by replacing some of the horses by specially selected camels, 150 horses and 100 camels (including some spare).—*Author.*

on which date the main column was to march to Archmán, whence, after having formed the Nukhurites into a militia force, the latter was to open communication with the flanking column. Both were then to halt for three days to concentrate their troops and baggage. About the 8th (20th) the main column was to march to Suncha, sending its cavalry to Begerden, on a level with which place was also to be the flanking force.

On the 9th (21st) the main column was to reach the Karagán stream at Opornoye, where by this date a two-months' supply of provisions was to be stored. Here a halt was to be made for a week to arrange for the line of communications, while the flanking column was to march to a level with Káriz, keeping open its communications with the main force and drawing supplies from Opornoye.

On the 17th (29th) the main column was to advance with all its artillery, one-month's supply of provisions, and half-a-month's forage for both its own troops and those of the flanking column (not including the eight days' supply carried regimentally). The flanking column was to be on a level with Yegyán-Bátir-Kala.

This place was to be occupied on the 18th (30th) by the main column, while the flanking force was to be in the pass, where three days were to be spent in the construction of a fortified post.

On the 21st November (3rd December) the main body was to advance to Yangi-Kala, and at once open communication with the flanking column, sending its cavalry into the steppe and to Ashkábád.

The siege of Gok-Tapa was then to be undertaken, during which supplies were to be brought up to the siege corps by camels from Opornoye, and the dépôts at that place filled up by a waggon-train of 100 carriages, with a total carrying power of 1,600 cwt., from the Bámi dépôt.

Before the advance could be finally decided upon, however, it was necessary to provide for the supply of the dépôts on both lines of communication, and organize properly the transport on those lines. If Grodekoff's mission to Persia proved a success, this transport would only have to carry 8,000 cwt. of provisions every month from Mulla-Kári to Bámi as the supply of forage would be received; but, if not, it would have to carry 15,360 cwt. (8,000 cwt. of provisions and 7,360 cwt. of forage).^{*} It was proposed to detail for this purpose 3,000 Government camels, and a special contract was made with the merchant Gromoff to supply 9,600 cwt. of forage for them every month at Bámi and on the Micháelovsk line. Besides the above, there had to be transported to Bámi many other supplies for the army, such as *kibitkas*, *yulameikas*, the 4th temporary field hospital, bedding felts, &c.—in all 5,440 cwt.[†]

The Commander-in-Chief of the Army of the Caucasus, to whom General Skobelev presented his plan, completely agreed with the proposals made both for the date of the commencement of active operations and for the general conduct of the campaign, and expressed his entire approval of the idea of placing the troops of the 21st Division, which had been so long and so severely tried in Trans-Caspia, in the place of honour. This measure appeared to His Imperial Highness not only a gracious act towards them, but one of common justice. The Commander-in-Chief also approved of General Skobelev's idea of sending a flanking column along the southern slopes of the Kopet-Dágh at the same time as the main army advanced from Bámi. Notwithstanding that this measure

^{*} In Appendix No. LX.—See calculation of monthly requirements in the way of supplies of operating force.—*Author*.

[†] Diary of the 3rd Section of the General Staff, Trans-Caspian Field Force, 1880, No. 28, Part I.—*Author*.

might be expected to cause some outcry in non-military circles, the Prince saw no reason for giving it up, and only said that he considered it should be carried out with as little preliminary fuss and as quickly as possible.*

In the course of the operations this plan was modified in some important points, but in none of its essentials. Thus the wheeled transport by which supplies were to be brought up to Opornoye was formed too late, and therefore Opornoye was not occupied; and for it had to be substituted the settlement of Yegyán-Bátir-Kala, where a two-months' supply of provisions was gathered. Although the quantity of oats laid down in the plan was actually brought to Bámi, only a very small part of it was taken up to Yegyán-Bátir-Kala. The advance against Gok-Tapa was put off for a whole month, the composition of the flanking column was considerably modified, and, finally, the success of the operations in Persia enabled the total amount of provisions carried up to Bámi to be reduced to 33,600 cwt.—i.e., to a 4½-months' supply for the army of operations.

From the above plan it will be seen that all depended upon the camel transport being organized at once, systematized, and carefully looked after. On the 4th (16th) September, there were published in General Orders regulations for Government camel transport, on the basis of which one transport corps was formed out of all the Mangishlák camels, and another out of those from Orenburg. These corps were commanded by officers of the army, and they were divided into sections of 200 camels each in the Mangishlák and 300 in the Orenburg corps. Kirghiz *caravanbáshis* were appointed chiefs of sections.†

The 5,822 camels on the Micháclovsk line in the beginning of September had by the 1st (13th) October been increased to 11,280, and by the 15th (27th) idem this number had risen to 13,180,‡ of which 9,500 were Government camels.

It was impossible for two chiefs of corps, even though they had assistants, to superintend such a mass of animals, and therefore by General Order of the 10th (22nd) October all the Orenburg camels were divided into four transport corps, while those from Mangishlák kept their former organization. These were numbered from 1 to 5, No. 1 being the Mangishlák corps; and to ensure better superintendence, the sections in the Orenburg corps were reduced to 200 camels each.

"I do not, however, flatter myself," wrote General Skobelev to the War Minister, "that we shall succeed in avoiding considerable losses among the camels, as it is impossible to look after them with that extreme care which is necessary. Besides, the very nature of our operations and the enormous number of animals will render the supply of green food to them very difficult; and, as they cannot always be supplied with forage, we must expect some losses among them."§

The 3rd, 4th, and 5th Transport Corps (about 4,400 animals) were told off to the advanced force to carry all stores up the line, while the 1st and 2nd (1,800 animals) carried stores from Mulla-Kári to Bámi, and were under the orders of the officer in charge of the lines of communication.

* Letter from Pavloff to Skobelev, dated 4th (16th) October 1880, No. 4001.—*Author*.

† For details of the organization of Government camel transport, see Chapter XI.—*Author*.

‡ In the beginning of September there were—3,000 Mangishlák, 1,474 Orenburg camels, and 1,349 supplied by Gromoff. There arrived at Krásnovodsk:—14th (26th) September, 1,476 Orenburg camels (3rd *échelon*); 1st (13th) October, 1,680 Orenburg camels (4th *échelon*) and 2,300 from Gromoff; and on the 14th (26th) October, 1,903 camels of the last *échelon* from Orenburg.—*Author*.

§ Letter from General Skobelev to the War Minister, No. 3, dated 24th September (6th October) 1880.—*Author*.

A new contract was concluded with the merchant Gromoff, who had neither delivered his camels within the time specified in his contract of the 23rd April (5th May) 1880, nor supplied the full number of animals. Gromoff had engaged to furnish 5,000 camels in Trans-Caspia, and was to receive 10 *roubles* for the conveyance of each animal to the district and 25 *roubles* a month for each animal actually doing work. The contract was to have been fulfilled by the 23rd June (5th July); but up to the middle of August Gromoff had delivered no camels, and it was only on the 15th (27th) of that month that his agent, Voloshin, announced that 754 camels had arrived, and requested that they should be taken over. On inspecting them, however, a board found that there were only 743 camels, and of these only 601 were fit for service; that there were only 88 camel-drivers, whereas 150 should have been supplied for 750 camels; that most of the saddles were in wretched condition; that the camel-drivers had neither rations nor money; and that Gromoff's agent had neither money nor credit to supply the men. Under these circumstances the Government might have considered that the contractor had failed to carry out his agreement; but there would have been no practical use in this, and the operations might have been delayed. Gromoff had given no earnest-money for the contract, and therefore he could not be punished by confiscating any of his property; and, besides, no provision had been made to prevent the contractor from taking away his camels, as the camel-owners wished him to do; indeed, the latter not only loudly expressed their discontent at being taken to Akhál-Tekke, but had at the gulf of Karabughaz even openly resisted, giving as their reason that they did not wish to fight against their co-religionists in Akhál.

Gromoff's transport, therefore, required immediate Government assistance, failing which the mobility of the Expeditionary Force would have been greatly interfered with. General Petrúsevitch accordingly took over 1,349 camels* and 219 drivers, which had arrived at Krásnovodsk on the 15th (27th) and 19th (31st) August, and furnished them with Government rations. They were placed temporarily under the Government administration.†

It had then to be decided—(1) Should Gromoff's contract be allowed to stand, a few details being changed in consequence of the specified number of animals not having been delivered on the dates specified; and (2) how was Gromoff to carry out the transport work? Were the ordinary rules of Government transport to be applied to his camels, or was a contract for piece-work to be entered into with him?

The contract entered into with Gromoff was really so difficult of execution that its acceptance by him could only have been caused by a great spirit of enterprise, or else he must have been in complete ignorance of local circumstances. General Skobelev, indeed, looked upon the contract with Gromoff from a political and commercial rather than from a financial point of view. The necessity of reviving commerce and caravan communication between Krásnovodsk and Khiva had long been recognized in Trans-Caspia, and in the interests of the Empire. General Skobelev thought it best that Government should suffer some losses for the benefit of enterprising people, who risked their time, labour, and credit for an idea newly applied, and quite out of the ordinary run. The political side of the question under consideration was also of considerable importance. The larger number of Gromoff's camel-drivers had been enlisted in the semi-independent Khánate of Khiva, and it was of

* Of which 1,208 were fit for work (General Order, Trans-Caspian District, No. 259, dated 28th August (9th September) 1880).—*Author*.

† General Orders, Trans-Caspian District, Nos. 229 and 240, dated 16th (28th) and 20th August (1st September) 1880.—*Author*.

consequence that they should return home satisfied. They had to be shewn that Russia was strong and just, took care of their well-being in a distant land, and, finally, would not let even Gromoff maltreat them. To attain these ends, it was necessary to bind Gromoff down to some conditions, which, if not excessively favourable for him, were such as he could accept. The people of Central Asia live principally through their imagination—an axiom which General Skobelev steadily maintained. In this peculiarity has hitherto lain our strength, and by taking advantage of it we may hope to escape from dangers in the future.* Nowhere is it so discredited as in Asia that Moscow was burnt with a penny candle. Who of those acquainted with the secret of Central Asian dealings does not know the bad consequences of our not too conscientious fulfilment of our bargains for camels in Turkistán during the campaign against Khiva?

The weak side of our contract with Gromoff was the danger of baneful political results in our Central Asian possessions. However the contract might be worded, the camel-drivers would consider themselves in the service of the *Ak-Padishah*, and all their hardships would be attributed to the Government. The *mullahs* would take advantage of the occasion if they returned discontented and reduced to beggary. Herein lies the cause of many risings in Central Asia which have been considered by the immediate administrative authorities as perfectly without motive and uncalled for.

With these broad views, the Commander of the Expedition assembled a board† to settle the question regarding Gromoff's supply of camels. This board, which included Chief Controller Cherevanski, considered it necessary to conclude a new contract with Gromoff on the following bases:—(1) He was to be paid for transport at so much per cwt., deductions being made on one side for the payment for marching money for the camels, and on the other for the realization of the fines due from him for non-fulfilment of his contract of 23rd April (5th May) 1880; (2) the payment per cwt. was to be proportional to the 25 *roubles* per month mentioned in the contract, and to the distance a camel could travel in a month. This made approximately 1 *kopeck* per *verst* and per *pud*. Under any other circumstances such a price would have been considered absurdly high when compared with those usually obtaining; for instance, in Turkistán $\frac{13}{100}$ *kopeck* is paid per *verst* and per *pud*; but this measure had to be adopted to meet the above considerations and the interests of the Government, and it was both too late and impossible to adopt others.

The new contract with Gromoff was concluded on the 17th (29th October‡). He bound himself to carry from Mulla-Kári to Bámi not less than 9,600 cwt. of stores per month for a period of 8 months, *i.e.*, in all 76,800 cwt., on payment of 2 *roubles* 30 *kopecks* per *pud* (36·1 lbs.). For stores carried by him from Krásnovodsk to Mulla-Kári he was to receive $\frac{8}{10}$ *kopeck* per *pud* and per *verst*. Payment was only to be made for stores actually carried, and the contractor was to pay the cost of all stores entrusted to him which were not brought in, allowance being made for fair wear and tear. For each of the 1,349 camels taken over by Government,§ the latter was to pay him 25 *roubles* per month, as specified in the contract of the 23rd April (5th May), counting from the day of their being taken over to that of their return to the contractor, who was to have no claim for payment for those which died, but only for those actually present with

* Letter from General Skobelev to the War Minister, No. 3, dated 24th September (6th October) 1880.—*Author*.

† At Krásnovodsk on the 16th (28th) September 1880.—*Author*.

‡ Diary of the Staff of the Trans-Caspian Field Force, 1880, No. 49.—*Author*.

§ 761 camels from August 15th (27th) and 588 from August 19th (31st).—*Author*.

the army. In case of necessity rations might be issued to Gromoff for his camel-drivers, but only at Krásnovodsk and at Mulla-Kári, and there only on payment. The Temporary Commander of the Troops reserved to himself the power of equipping the camel-drivers and treating them as he thought best, and according to the contract made with Gromoff. In case of the latter not delivering 9,600 cwt. of stores *per mensem*, 10 per cent. of the payment allowed for transport was to be deducted for all stores not delivered.*

The duty of carrying out punctually the plan for concentrating the necessary amount of provisions at Bámi from the supply depôts at Krásnovodsk and Micháelovsk was entrusted by the Commander of the Expedition to General Annenkoff. General Skobelev stipulated that 33,600 cwt. of provisions should be concentrated at Bámi by the 5th (17th) November; he at the same time strongly insisted that the camels should have a rest on their return to Mulla-Kári. "It is now necessary," he wrote to General Annenkoff on the 29th September (11th October), "to hasten the transport of stores to Micháelovsk. The Expedition can under no circumstances be delayed; otherwise the jaded condition of the camels will cause mortality amongst them. Consequently the quicker they are made use of the better. To waste time now, even a few hours only, might ruin our chances of success. The employment of camels for anything but their proper purposes was only permitted in matters of extreme necessity, and for this General Skobelev made General Annenkoff responsible.

"In accordance with the primary principles laid down above, the Commander of the Expedition ordered General Annenkoff to transport to Micháelovsk all the provisions in the Krásnovodsk store depôt, leaving only at that place the amount of supplies required for the local garrison up to the 1st (13th) July 1881, and for the troops passing through (3,000 men and 600 horses). All the barges and Turkumán boats, which could carry altogether at a trip about 42,560 cwt., were therefore at once to be loaded with these supplies and sent off to Micháelovsk. 9,600 cwt. of hay were also to be transported thither, and all this was to be finished by the 1st (13th) October."†

The transport of such an enormous quantity of stores at one time to Micháelovsk entailed unloading the boats by night as well as by day, and it became necessary to illuminate the piers and their environs by the electric light. General Skobelev, therefore, obtained from St. Petersburg 8 electric lamps on Yablochkoff's system, one Siemen's regulator, and two dynamo-electric machines, the cost of the whole, including carriage, being 5,588 *roubles*. These *apparats* were delivered at Micháelovsk on the 26th October (7th November).

To provide against accidents, General Skobelev directed 32,000 cwt. of provisions, over and above those ordered to be despatched to Trans-Caspia as a supply till the 1st (13th) July 1881, to be sent from Astrákhán and the Caucasus to Krásnovodsk.

The camels which had arrived in Trans-Caspia from the Emba and the Us Yurt were allowed to rest during the month of September, and were organized into transport corps. After these, there arrived in September only one *échelon* of Gromoff's camels (569 head), and these were sent to Duz-Ölüm to carry supplies to Khwája-Kala and Band-Hassan, where the supplies were only sufficient to last till the end of September. During October, however, there arrived at Bámi the following camel *échelons*:—1st (13th) October, 500 of Gromoff's

camels; 14th (26th), 1,304 from Orenburg and 841 from Mangishlák; 18th (30th), 1,500 of Gromoff's; 21st October (2nd November), 800 of Gromoff's and 1,800 from Orenburg, and 31st October (12th November), 700 of Gromoff's—in all 7,445 camels. These *échelons* brought 348 *gylameikas*, 1,000 knitted waist coats, and a small quantity of Red Cross stores. All the rest of their loads consisted of provisions. Thus by the 1st (13th) November the amount of supplies in the Bámi store-depôt had reached 33,420 cwt. of provisions and 1,280 cwt. of oats.*

All transport corps returned on the 2nd day after their arrival, or after a halt of one day. The Orenburg camels told off to the Advanced Force were collected in the gorge near Kizil-Arvat for rest and pasturage, and to guard them the 15th Company of the Daghistán Regiment was sent up from Khwája-Kala.

During October the transport of supplies to Krásnovodsk and Chikishliar was continued according to the plan, and the extra 32,000 cwt. of supplies were also delivered. At the same time to provide for a winter campaign there were brought over from Astrakhán to Micháelovsk, 200 *kubittas* and 1,200 *gylameikas* prepared in Orenburg by Miakinkoff; to Micháelovsk and to Chikishliar, 10,888 yards of bedding felts in equal quantities to each post; to Chikishliar and to Krásnovodsk, 6,000 pairs of boots and leather for 6,000 pairs in addition; to Krásnovodsk and partly to Chikishliar, 5,000 knitted waistcoats. Fur coats were also brought over in September for the troops then in the country; but those troops detailed for service, and still on the west coast, were to bring their winter clothing with them from the Caucasus. The orders given for the despatch to Akhál of 5,000 pairs of foot-cloths were not carried out, but all the great-coat cloth in store (more than 4,500 yards) was sent over and cut up into foot-cloths. To provide the troops with tentage in lieu of that which had become unserviceable, the Intendant of the Force was ordered to keep in store tentage sufficient for 3 battalions, 3 batteries, and 2 squadrons. In order to hasten the delivery of supplies at Micháelovsk, the Officer Commanding the Lines of Communication caused a quay to be built off Rau island, where stores brought in deep-sea steamers from Astrakhán could, after the 24th October (5th November), be transferred to barges without going into Krásnovodsk.

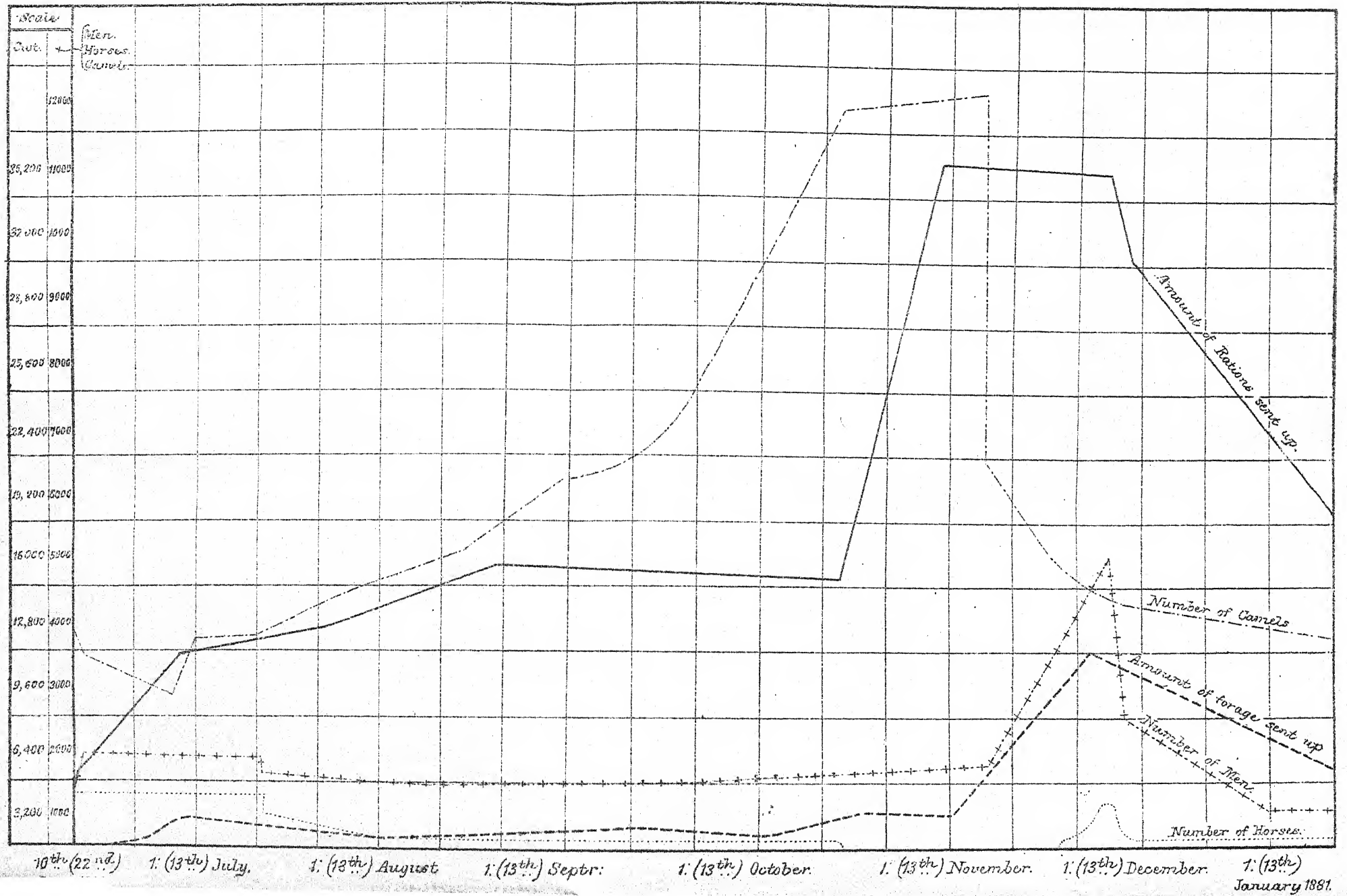
General Skobeleff, who had intended to visit the Micháelovsk line and Bámi in the beginning of October, was so much taken up with the care of stocking the stations on the Atrak line with provisions, that he put off his departure, and sent Captain Nedomanski of the General Staff to Bámi on the 3rd (15th) October with the following instructions:—

- (1) The quantity of each description of supplies in the Bámi provision supply depôt is to be verified; a quantity of the best provisions and the least damaged packages are to be picked out for the Army of Operations, as are also a number of tarpaulins to cover up the biscuit during the advance.
- (2) The question of forage is to be settled with the Commander of the Advanced Force. A formal order is to be given to Colonel Verjbitski that General Skobeleff will not allow the Bámi supply-depôt to be drawn upon for forage until there are 12,800 cwt. of oats in it. To enable this to be done, all horses, including even those of the officers, are to be sent away from Bámi to Duz-Olum. At Bámi there are only to be kept the following horses:—Colonel Verjbitski, 1; Lieutenant-Colonel Haidaroff, 1; Lieutenant-Colonel Prince

* See Graphic Table opposite.—*Author.*

GRAPHIC TABLE

Showing the accumulation of provisions at, and the movement of men and horses to, Bami, and the number of camels (Government and private) working on the Atrak and Michaelovsk Lines from the 10th (22nd) June 1880 (the date of the occupation of Bami) to the 1st (13th) January 1881.



Mahaloff, 1; Captains Melnitski and Nedomanski of the General Staff, 1 each; and also those of the officers of the heliographic detachment and sapper company. The 3rd *Sotnia* of Taman Cossacks, with a strength of 60 to 70 men, will remain at Bámi, all its weakly horses being weeded out and sent with the 2nd *Sotnia* of the same regiment to Duz-Olum. All horses remaining at Bámi are to receive only 6·9 lbs. of oats *per diem*. The horses of the 4th Battery, 20th Artillery Brigade, are to be used to carry oats from the Duz-Olum depôt to Bámi. Those of the 6th Battery, 21st Brigade, are to be sent to Duz-Olum, and replaced on the stages of the line of communications by camels which are to be taken from the camel infirmary at Band-Hassan. If the necessity arises of moving the guns from Bámi, they can be drawn by Cossack horses or by camels.

- (3) The *sotnias* of the Taman Cossacks from Khwája-Kala and Band-Hassan right down to Társakan are to be concentrated at Duz-Olum under the orders of Colonel Artsishevski.
- (4) To get the artillery ready for the forthcoming campaign, arrangements are to be made, under the orders of Colonel Verjbitski, for detailing the number of guns to accompany the Army of Operations, taking care that the distribution of the artillery on the lines of communication (except in the cases of the 6th Battery, 21st Brigade, and the Horse Mountain Division) is not interfered with. The arrangements for mobilization are to be considered. It is desirable that Colonel Verjbitski should, if possible, horse these guns with proper artillery horses (4 per gun), or with the horses of those corps of the 21st Infantry Division which have no carriages. "Colonel Verjbitski will, however, be interested in this, as, if sufficient artillery horses are not forthcoming, those of the Taman Cossacks will be taken."
- (5) All guns are to have two complements of ammunition, and the number of rounds at Bámi is to be ascertained, and those deficient brought up from Chikishliar. Two complements of small-arm ammunition are to be held in readiness to be moved up to Opornoye on camels, for the Army of Operations. With the latter it is proposed to have three complements of small-arm ammunition per rifle—1 in possession of the men, 1 in charge of corps, and 1 in reserve. Such a quantity of ammunition is more than sufficient, taking into consideration the fact that during the Turkish War the 16th Infantry Division expended altogether only 1,421,781 cartridges, or 142 per rifle. The same may be said of the supply of artillery ammunition, as in 1875 there were expended before Ná-mangán altogether 780 shell and 300 bomb shells before the enemy ran away, and before the storming of Andiján there were fired 1,700 rounds. There must be at least five complements of cavalry cartridges.
- (6) The engineer park at Bámi is to be inspected, and the number of tools in it compared with that laid down in the scheme prepared at St. Petersburg; and to these must be added barrels for the construction of *fougasses*.
- (7) A temporary field hospital with 20 beds and 500 sets of bandaging materials is to be got ready for the force which is to advance to occupy Opornoye.

On the 12th (24th) October, Captain Nedomanski handed over to the Commander of the Advanced Force the above orders. At that time there were at Bámi the following guns :—

9-pounder bronze	...	...	...	7
4-pounder bronze	...	...	...	24
4-pounder steel	...	...	...	3
				—
	Total	...		34
				—

Out of these there were formed three mobile batteries, one of seven 9-pr. guns, and two of 4-pr. guns. It was then proposed to bring up two guns each from Band-Hassan and Khwāja-Kala and use them, and the remaining 4-prs. (15 in all) for the armament of Bámi, Opornoye, and Yegyán-Bátir-Kala. Thus the artillery for the siege of Gok-Tapa would be composed as follows :—

New pattern (steel) guns.

4 heavy guns (1-21st Brigade).
24 light guns (4-20th Brigade, 3rd and 4-19th Brigade).

—
28
—

Mobilized guns.

7 9-pr. guns.
16 4-pr. guns.

—
23
—

Mountain guns.

8 guns of 6-21st Brigade.
2 horse mountain guns.
2 guns, 5th Mobilized Division of 6-21st Brigade.

—
12
—

18-pounder mortars.

6 1-21st Brigade.
10 mobilized.

—
16
—

6 guns of the naval battery.

—
Grand total 85 guns.
—

In Chapter VII it was mentioned that the Commander of the Expedition in the beginning of June sent Lieutenant-Colonel Bobrikoff down the line to bring up old guns to the front, as the reconnaissance of Gok-Tapa on the 6th (18th) July had shewn the necessity of having a powerful force of artillery for operations against this fortress. Besides mortars, 9-pr. guns had been demanded from the Caucasus, and thus abundant *matériel* was at General Skobelev's disposal. This had now to be organized, and in August the General ordered Colonel Verjbitski to work out a plan for the formation of so-called "mobile batteries." The main points of this plan were as follows :—

- (1) Battery commanders were to be nominated, who should be responsible for the preservation of the *matériel* and the instruction of the men.

- (2) These commanders were to receive the table money and pay of battery commanders.
- (3) For messing expenses 150 *roubles* per battery were to be allowed.
- (4) The batteries were to be horsed by artillery or train horses.

General Skobelev approved of the plan and appointed the following battery commanders:—To No. 1, Captain Maksheeff; to No. 2, Staff-Captain Chepur-noff; and to No. 3, Staff Captain Micháeloff.

All the guns required for the mobile batteries had first of all to be transported from Chikishliar to Bámi, and for this duty there were available the horses of the 4th Battery, 20th Brigade; 6th Battery, 21st Brigade; the re-organized Trans-Caspian Artillery, and the trained horses of the several corps and the field treasure chest; but as the number of horses was quite insufficient to bring up the huge quantity of stores which had collected at Chikishliar, General Skobelev gave orders to prepare camel harness to be used with the guns and ammunition-waggons. Artillery stores had been delivered at Chikishliar in the same manner as other articles, and therefore there was no little difficulty in picking out guns, carriages, ammunition-waggons, wheels, and other small stores from this chaos. Many articles had been damaged in transport or in loading; the small stores were not in good order; many were deficient, and there was no harness. All this had to be organized, and not a little labour and energy was necessary. The guns and ammunition-waggons were put upon their wheels, formed into marching batteries, and sent up to Bámi with the first available camel caravans in charge of artillery officers; and three or four gunners from the Gunib or other local artillery detachments of the Caucasus were directed to proceed with each gun. This went on from June till November, and, with few exceptions, the same men and horses were working at it the whole time. This could not but have a bad effect upon the condition of the latter, more especially as towards the end of the preparatory period the issue of corn to them was discontinued.

On the 26th August (7th September) the commanders of the batteries took over the stores at Bámi and proceeded with the formation of the batteries. Each received 50 men from the 3rd Company of the Gunib Fortress Artillery and the local detachments sent over from the Caucasus. The amount of instruction in field artillery duties possessed by the former was small, and that by the latter absolutely *nil*; and, as there were hardly any sergeants, bombardiers and gunners of the Fortress Artillery had to be promoted to that rank. The *matériel*, most of which was at hand, had also to be got into order. Primers had to be made out of telegraph wire, leather-work supplied from the hides of dead camels, and wheels and other wooden stores made up with wood cut in the valleys of the Kopet-Dágh. Gun-drill and aiming-practice were carried out twice a day, and battery drill (limbering-up and unlimbering) taught at first without and afterwards with horses. Finally, the batteries were taken out to target-practice (10 rounds per gun), the objects fired at being the walls round Bámi.

The mobilized batteries thus formed were brought up to Gok-Tapa, where they performed their duties in a perfectly satisfactory manner. They certainly could not perform battery drill well, but in Asiatic warfare, and especially in a siege resembling that for which these batteries were formed, such is not required. The country was also thus saved the large expenditure which the despatch of more permanent field batteries would have entailed. The idea of forming them was entirely General Skobelev's own, and one which he had several times previously put into practice in Farghána.

Simultaneously with the above, a horse mountain division was formed at Chikishliar. On the 7th (19th) June the Commander of the Expedition telegraphed to General Sofiano that to give the cavalry greater independence in prolonged and far-reaching movements in hilly districts, he considered it necessary to have with the force two horse mountain guns of the same description as those used in Farghāna, and asked for the despatch of such stores as would enable him to similarly equip two of the mountain guns already with the force. On receipt of this telegram, General Sofiano at once applied to the Central Artillery Direction for the necessary *matériel*. On the 1st (13th) August the stores for the horse mountain division* arrived at Chikishliar, and the organization of this force was entrusted to Lieutenant Shakhovski of the 21st Artillery Brigade. The horses for the division, 48 in number,† were taken partly from the reorganized Krásnovodsk Artillery, and partly from those bought in Mangishlák by Colonel Kolodaiyeff. The men, 36 in all,‡ were taken partly from the 6th Battery, 21st Brigade, partly from the 3rd Company of the Gunib Fortress Artillery, and the drivers were taken from among those of the Apsheron and Daghistán regiments. During August and September, and up to the 19th (31st) October, the division was drilled as a horse-division in the environs of Chikishliar, and on the latter day it marched for Duz-Olum, which it reached on the 24th October (5th November).

In the period under review, there were gathered at Bámi 85 guns with the following amount of ammunition:—New pattern 4-pounder guns, 330 rounds (2 complements) per gun; for the 16 mobile 4-pounder guns, 237 rounds (nearly 2 complements) per gun; for 8 4-pounder guns intended to serve as armament of posts, 120 rounds per gun (nearly 1 complement); for the 7 9-pounder guns, 46 rounds each ($\frac{1}{2}$ complement), and for 12 mountain guns, 300 rounds each (more than 2 complements). Thus the quantity of ammunition was below that considered necessary by the Commander of the Expedition; and accordingly Colonel Verjbitski telegraphed to the west coast for what was wanting to be sent over, and also sent a demand down to Chikishliar for all the artillery ammunition, gun carriages, and camel harness for ammunition-waggons in store at that place to be sent up. On inspecting the *matériel* of the mobile batteries, it was found to be in a bad state, especially as regards wheels, which were almost all warped. Although there were 56 spare wheels, the spokes of those were falling out and the tires did not fit. Colonel Verjbitski had therefore to send a company of the Apsheron Regiment into the hills to burn charcoal to repair the iron work of the carriages.

* The 3-pounder mountain guns are on mountain carriages, which can be limbered up to horse-mountain limbers of special construction. These limbers consist of two wheels and an axle on which is fixed a basket of iron rods; to the axle is fitted a field draught pole, and in the basket are placed two ordinary mountain ammunition boxes. The ammunition-wagon consists of two mountain battery wheels with an axle, on which is also fixed a basket twice as large as that of the limber-shafts and splinter-bars for draught; three abreast are supplied for the ammunition-wagon, and in its basket can be placed 4 mountain ammunition boxes. The gun and limber are drawn by 4 horses two abreast, the ammunition-wagon by 3 horses abreast, like the former 3 horse ammunition carts of the field artillery. The off-horses of the gun-team and the shaft and off-horse of the ammunition-wagon have special pack-saddles, upon which can be carried gun-carriage, wheels, pole-shafts, and limber and wagon baskets. The whole detachment is mounted, and their saddles are also fitted for pack-carriage when the battery is so marching. Wheels, pole-shafts, splinter-bars, and side arms are then carried on the detachment horses; the remainder of the *matériel* on the draught horses.—*Author*.

† 21 horses per gun:—1 for the No. 1, 2 gun-leaders, 2 gun-wheelers, 6 for the detachment, 3 for horse-holders, 3 for the ammunition-wagon, and 4 for 4 spare numbers: total for 2 guns, 42, and 1 for the trumpeter, 1 for the sergeant-major, and 4 spare and baggage horses.—*Author*.

‡ Distributed as follows:—1 sergeant, 1 head-driver, 1 wheel-driver, 6 numbers with the gun, 4 spare numbers, 3 horse-holders, 1 wagon-driver per gun, 1 sergeant-major, and 1 trumpeter per division (*Artillery Journal*, No. 10 of 1881, pages 640 and 641).—*Author*.

On the 10th (22nd) October the 3rd company of the Gunib Fortress Artillery arrived at Bámi, and its men were distributed amongst the mobile batteries and set to work to learn their drill. The harness for camel draught for the guns and waggons got ready in Chikishliar and sent thither from Tiflis had also by this time been partly delivered at Bámi.

For the advance to occupy Opornoye the 8 4-pounder guns forming the 3rd Mobile Battery were completely ready. The fortress artillery men forming the gun detachments (of only 5 men each however) had been well instructed in their duties, and the work of making up rounds had been actively pushed on.*

Of small-arm ammunition, there were in hand 5 complements (300 rounds per rifle) for 5,000 infantry and $6\frac{1}{2}$ complements (266 per rifle) for 1,200 cavalry, and besides the troops had in their possession two or three complements of ammunition.

In the engineer park there were the following tools:—

Shovels	...	...	...	...	...	1,280
Hoes with picks	...	...	...	...	...	357
Spades	...	...	...	...	...	250
Pickaxes	...	...	...	...	...	350
Axes	...	...	...	...	...	350
Crowbars	...	...	...	...	...	63
Whetstones	...	...	...	...	...	2
Sandbags	...	...	...	...	...	5,000

besides a field forge, 4 boxes of dynamite, carpenters', smiths', and locksmiths' tools, and Bickford's fuzes. Many tools were still at Chikishliar and along the Atrak line; and a telegram was sent to have them pushed up to Bámi. For the Advanced Force was prepared a park of 1,000 shovels, 300 hoes with picks, 100 axes, 10 crowbars, 2 whetstones, 5,060 sandbags, 2 boxes of dynamite, Bickford's fuzes, artisans' tools, and a field forge.

On inspecting the supply-depôt, it appeared that the biscuit was packed in such bad sacks that it would have to be placed in new ones for further transport, and securely covered with new mats. Part of the buckwheat groats was packed in covers of double-matting so old and rotten that at the least movement they burst. A large number of tarpaulins, sacks, mats, and ropes was therefore brought up from Astrákhán.

The ten days' supply of provisions for 8,000 men required for the advance to Opornoye was packed up ready for loading.

In consequence of the orders given by the Commander of the Expedition for the discontinuance of the issue of oats to horses at Bámi, Colonel Verjbitski retained only one (the 3rd) Taman *sotnia* in the first line, divided equally between Band-Hassan and Kizil-Arvat, where Cossacks were required to protect the camels and the grass-cutters. The 4th *sotnia* of the Taman Regiment from Band-Hassan and the 2nd *sotnia* of the same regiment, which had arrived at Bámi on the 14th (26th) October with a convoy from Mulla-Kári, were directed on Duz-Olum, where they arrived on the 20th October (1st November). With the exception of a few *jigits*, there were then no cavalry at Bámi.

Almost the whole garrison had fur-coats, and with General Murávieff's convoy there had arrived 1,800 knitted waistcoats, so that those who had no

* There had been made up in all 2,160 rounds for 4-pounder and 1,000 for mountain guns.—
Author.

fur-coats could be provided with other warm clothing. Besides many articles of under-clothing and warm clothing were issued to the troops by the Red Cross Society. Packets of bandaging materials were available considerably over the 500 laid down as necessary.

As regards the bedsteads required for the hospital of the force to be moved forward, none were at the moment available from the general hospital; so a field hospital of twenty beds was mobilized by the 1st Battalion of the Samur Regiment.

The Commander of the Expedition approved of all Colonel Verjbitski's measures for the organization of the artillery, but instead of the ten days' supply with which it was proposed to advance for the occupation of Opornoye, General Skobelev ordered a two-months' supply of flour, groats, and biscuit for 7,000 men, in all 10,240 cwt.; one complement of ammunition for the guns of the force, two complements of cartridges for 5,000 infantry, and 6,400 cwt. of oats, and the necessary engineer park to be prepared for pack transport at Bámi.*

In the previous part of this work the difficulties encountered in gathering transport on the Atrak line have been mentioned. On the 1st (13th) September there were 2,641·6 cwt. of artillery stores at Chikishliar awaiting transport to Bámi and requiring a total carriage of 80 *arabas* and 814 camels, not counting artillery ammunition-wagons and spare gun carriages.† The line commandant had, however, at his disposal only 25 *arabas* and 150 camels, and expected in addition 50 of Sansieff's *arabas* from the west coast of the Caspian. In the course of September there were expected from Baku a supply of wheels, harness, and materials for equipping the mobilized guns, and 16 mortars with 300 shells each; and these stores, weighing in all 960 cwt., would also have to be forwarded to Bámi. In addition to artillery stores, he had also to supply the garrisons on the Atrak line with provisions. Some of these, *e.g.*, Khwāja-Kala, were only being supplied from day to day, and Colonel Verjbitski had to depart from General Skobelev's principle of sending everything forward and nothing back and to send supplies to Band-Hassan from Bámi,‡ and he had also to establish a price current for flour and rice at Bámi, so as to determine the amount of ration money to be issued to the camel-drivers in lieu of rations until a sufficient quantity of these had been brought up.§

The organization of the transport service on the Atrak line was entrusted to the Intendant Kalnitski. He first applied to Lieutenant-Colonel Shtsherbina for camels, and requested him to procure 800 or 1,000 head. But as Shtsherbina was engaged in investigating the subject of the purchase of camels in the spring, and as he had been relieved from all his military duties, he refused to comply with this request without authority from the General commanding. The Intendant then applied to the merchant Terogánoff. Although unwilling to have any dealings with this man, General Skobelev authorized Kalnitski to conclude a contract with him to carry stores from Chikishliar and Duz-Olum to the advanced posts of the Atrak line for the period from the 10th (22nd) September 1880 to the 1st (13th) May 1881.

* Telegram from him to Colonel Verjbitski, No. 7036, dated 31st October (12th November) 1880.—*Author*.

† 980 shells for new pattern, 570 for 9-pr. and 1,360 for 4-pr. guns, 68 boxes of war rockets, 235 Berdan rifles, 9 barrels of powder, 1½ million of infantry and 110,440 cavalry cartridges, 47 artillery ammunition-wagons, and 6 spare gun carriages (Artishevski's Report, No. 1939, dated 31st August (12th September) 1880).—*Author*.

‡ Band-Hassan should have been supplied with provisions from the Khwāja-Kala store-depôt.—*Author*.

§ Colonel Verjbitski's Report, No. 360, dated 25th September (7th October) 1880.—*Author*.

On the basis of a contract concluded on the 10th (22nd) September, Terogánoff agreed to transport:—

		<i>Puds.</i>	<i>Per pud.</i>	
			R.	K.
From Chikishliar to Karája-Bátir	...	10,000* at	0	45
" " " Yágli-Olum	...	17,000 "	0	72
" " " Chát	...	7,000 "	0	95
" " " Duz-Olum	...	9,000 "	1	45
" " " Társakan	...	13,000 "	1	90
" " " Khwája-Kala	...	7,000 "	2	57½
" " " Band-Hassan	...	23,000 "	2	95
" Duz-Olum " Társakan	...	4,000 "	0	45
" " " Khwája-Kala	...	6,000 "	1	12½
" " " Band-Hassan	...	6,000 "	1	50

Total 105,000 *puds* (33,600 cwt.) for 173,415 *roubles* in credit notes.

He engaged to so carry out the transport service that there should at no time be any difficulty in supplying the troops either stationed at any one of those points or those passing through them, and in any case he was to forward not less than 17,600 cwt. of stores by the 1st (13th) January 1881; and of these 3,200 cwt. were to be despatched to Duz-Olum. He took upon himself all the responsibility of delivering the various packages whole and up to weight, less the amount allowed by law for wear and tear, and bound himself to make good deficiencies in money or in kind. If in the course of the military operations it should happen that his camels were seized and used for military purposes under the orders of the General Officer Commanding, for each such camel he was to receive 100 *roubles* from Government, and the animal was then to become Government property. If on the line of march the camels were driven off by the enemy or killed, or mutilated to such a degree as to be unfit for further service, Terogánoff was to receive 75 *roubles* for each animal so lost. In cases of extreme necessity, the contractor was authorized to draw supplies on payment for his drivers and camels from the supply-depôts at cost price; but this was only allowed if military considerations and the state of the depôts permitted of such issues. As a guarantee for the punctual fulfilment of the contract, 10 per cent. of its total value, *i.e.*, 17,350 *roubles*, was to be deducted from the first payment made to Terogánoff, and 200 camels belonging to him were to be a guarantee for this sum. If he, after accepting the contract, did not within 15 days establish his transport service, or if he did not deliver the stores within the time agreed upon, he was to be considered as having broken his contract.†

After making this contract, Terogánoff promised the Temporary Commander of the Troops to furnish means of transport for taking up artillery stores also from Chikishliar, and the supervision of the whole service was left to the Intendant of the Force.

When Terogánoff accepted the contract for carrying stores, he also requested Shtsherbina to help him to obtain camels; and the latter invited several Turkumáns, who had formerly furnished him with camels, to procure transport for Terogánoff. They consented, and, having received money, went off to the Atrak. Here the camel owners, at the suggestion of the *balýuz*‡ of Astrábád,

* 100 *puds* = 32 cwt.—*J. M. G.*

† See Appendix LXII.—Contract, dated 10th (22nd) September 1880, entered into between the Intendant of the Force and Terogánoff.—*Author.*

‡ An official who superintends foreign affairs in the border towns of Persia.—*Author.*

asked 30 *kráns* per camel for the journey to Duz-Olum, while the Turkumáns sent by Terogánoff only offered 24; and thus the delivery of the animals was much delayed, but still the camels arrived gradually at Chikishliar, and the stores began to be carried forward.

Colonel Grodekoff, who was at Astrábád in the beginning of September, seeing a large number of Turkumán camels feeding under the very walls of the town, had requested our Consul Shtshelkunoff to open negotiations with the Governor General of Astrábád with a view to the Turkumáns being forbidden to feed their camels in the environs of the town, and further to the end that the nomad Yamúts might be ordered to move beyond the Gurgán. There the Yamúts would find the country bare of grass, and, having no other pasture grounds, would be forced to cross over to the right bank of the Atrak, where they would be in our power. Shtshelkunoff set willingly to work, and invited the Governor-General, who was then at Finderisk quelling a disturbance, to come into the town, where he laid before him Grodekoff's proposals. Mustafa-Kuli-Khán refused to accede to the request, basing his refusal on the fact that the Yamúts were Persian subjects, and that, therefore, the Government was bound to protect, and not to oppress them. Nevertheless, he informed the Russian Consul that he was ready to use all his influence with the Turkumán elders, if the Persian Government thought proper to empower him to do so. As the Sháh agreed to the request made to him on this subject by the Russian Ambassador, Mustafa-Kuli-Khán summoned the elders of the Jáfarbai and Atabai Turkumáns to Astrábád, and Shtshelkunoff entered into negotiations* with them on the basis of the rate of payment laid down by Colonel Grodekoff, viz., 8 *roubles* per load to Duz-Olum and 16 *roubles* to Bámi for the 3,000 camels that we required.†

It must be remarked that there was at that time in the Russian telegraph office at Astrábád a certain Prince Vatchnadze, who, in the exercise of his duties as line inspector, had frequently to traverse the steppe between the Atrak and the Gurgán. He kept up constant relations with the Turkumáns, and sent in all the information he could obtain to Chikishliar; and the Consul, in whom the Turkumáns had implicit confidence, applied for assistance to Prince Vatchnadze, and this was willingly granted. The negotiations with the Turkumáns lasted throughout September.

The Commander of the Expedition, who, during this month, was residing at Krásnovodsk, having received no detailed reports from Intendant Kalnitski as to what was going on at Chikishliar, became uneasy as to the supply on the Atrak line, and relinquishing his intention of going by the Micháelovsk line to Bámi, he started from Chikishliar, where he arrived on the 5th (17th) October.

In the meantime the Intendant had requested Terogánoff to reply categorically as to whether he could supply transport for artillery stores, but the latter could give no decisive answer. Kalnitski then applied to the Consul, and requested him to send 900 camels to Chikishliar, and received a reply from him to the effect that the Turkumáns were ready to furnish 900 camels on receipt of 27 *kráns* per journey to Duz-Olum paid in advance, the jaded camels to be replaced by fresh ones after each journey. Under these circumstances Kalnitski ordered the Intendance official, Lieutenant Trirogoff, to invite public tenders for the transport of artillery stores on camels to Duz-Olum. Trirogoff found that within two weeks 900 camels could be obtained at the rate of 10 *roubles* 70 *kopecks* each, and therefore the Intendant entrusted him with

* Zinovieff's despatch, dated 16th (28th) September 1880.—*Author*.

† Colonel Grodekoff's telegram from Astrábád, dated 7th (19th) September 1880.—*Author*.

the transport of the artillery stores, and telegraphed to the Consul that the necessity for hiring 900 camels from the Turkumáns was past.*

A two days' stay at Chikishliar [5th (17th) and 6th (18th) October] shewed General Skobelev that from the date of concluding the contract Terogánoff had furnished only 500 camels. From the 6th (18th) to the 10th (22nd) October he supplied 1,140 more hired by Kul-Niáz, through whom he was working. The Turkumáns had taken the son of Kul-Niáz as a hostage or guarantee that, after they had received 24 *kráns* per camel for the journey to Duz-Olum, they should not be forced to go on to Bámi. Terogánoff then gave a promise that his contract should be carried out with all possible speed.

As the Engineer Statkovski had arrived, General Skobelev returned to Krásnovodsk to settle matters connected with the railway, and entrusted Count Orloff-Denisoff, Aide-de-Camp, with the superintendence of the execution of his orders for the provisioning of the Atrak line till 1st (13th) July 1881, and for the despatch to Bámi of the artillery stores and of 12,800 cwt. of oats. Count Orloff-Denisoff was to go up to Duz-Olum, and there take measures for at once throwing two months' supplies into Társakan, Khwája-Kala, and Band-Hassan; and when that was done, he was to see that the Intendance placed supplies on the whole line up to 1st (13th) July 1881. He was next to have the 12,800 cwt. of oats moved up to Bámi. Generally speaking, therefore, he was to represent the Temporary Commander of the Troops and give all necessary orders to the Intendant, the Road Commandant, and the Station Commandants.† At the same time General Skobelev considered it necessary to send Lieutenant-Colonel Shtsherbina back to the west coast of the Caspian.‡

On the 11th (23rd) October, General Skobelev returned to Chikishliar to make final arrangements for the supply service on the Atrak line. During his absence Terogánoff's arrangements had hardly been advanced at all, while Gromoff, whose presence alone had enabled General Skobelev to make any definite arrangements, had, during the four days of the General's absence, succeeded in collecting 5,000 camels after disbursing 56,000 *roubles* as advances among the Turkumáns, and had also started 2,200 camels with stores up the Atrak line, 693 of which had been hired by Prince Vatchnadze. Gromoff paid 12 *roubles* per camel for the distance from Chikishliar to Duz-Olum, and in addition issued rations on his own account to the camel drivers.

When Terogánoff, who had already paid some advances to the Turkumáns, saw that we could do without him, he handed over the 3,214 camels contracted for by him to Gromoff and retired from the competition. The Commander of the Expedition then ordered a new contract to be concluded with Gromoff for the transport by him of 8,000 cwt. of supplies by the 22nd October (3rd November) from Chikishliar to Duz-Olum, of 16,000 cwt. of oats from Duz-Olum to Bámi in equal parts on the 1st (13th) and 15th (27th) November, and of artillery stores and the baggage of the troops from Chikishliar to Bámi. The payment agreed upon was 1 *rouble* 45 *kopecks* per *pud* (36·1 lbs.) from Chikishliar to Duz-Olum, and 1 *rouble* 80 *kopecks* from Duz-Olum to Bámi. Gromoff was to be pecuniarily responsible for any diminution in the weight of the goods below the usual allowance, but the care of the artillery stores and of the soldiers' baggage was to be undertaken by the troops. For non-delivery of the stores within the stipulated time, and for any deficiencies in the number

* Intendant Kalnitski's Report, No. 4417, dated 30th September (12th October) 1880.—*Author*.

† Instructions to Count Orloff-Denisoff, No. 1598; Instructions to the Road Commandant on the Atrak line, No. 1590, dated 6th (18th) October 1880.—*Author*.

‡ Instructions to the Intendant of the Trans-Caspian District, No. 1581, dated 6th (18th) October 1880.—*Author*.

of camels furnished to carry artillery stores, Gromoff was to pay a fine, the amount of which was to be fixed by the Temporary Commander of the Troops.*

Thus the transport on the Atrak line was increased to 5,000 camels, and the hands of the Commander of the Expedition were completely freed. General Skobelev, who at first had only thought of supplying the garrisons on the Atrak line up to the 1st (13th) July 1881 by convoys sent up between the 10th (22nd) September 1880 and 1st (13th) May 1881,† was now enabled not only to begin his advance with all these garrisons fully supplied,‡ but even to provide a two-months' supply of provisions at Duz-Olum for the troops of the army of operations quite independent of the Bámi supply depôt.

The non-delivery of stores by Terogánoff had made him a defaulter, as he had broken his contract, and for this he could be compelled to pay a fine. All the same, we had succeeded in supplying the Atrak line, but camels had had either to be hired by the Intendance authorities at very high rates, or obtained through a new contractor, who could demand whatever prices he pleased. In a word, the indulgence shown to Terogánoff, and the negligence of the Intendance in not informing the Commander of the Expedition of the actual state of affairs between the 14th (26th) September and the 15th (27th) October, might have delayed the whole progress of the Expedition and caused an extra expenditure of more than 150,000 *roubles* for transport of supplies, of which only 17,000 could be recovered from Terogánoff. This circumstance, and also the fact of Intendant Kalnitski having ordered one of his staff, Lieutenant Trirogoff, to hire camels, and having authorized him to draw money for the number of camels hired and not for the number of *puds* carried, and other matters, caused General Skobelev to request the Intendant to forward a report upon the manner in which he had fulfilled his duties.§

The camels furnished by Terogánoff in the beginning of October only arrived in small parties at Chikishliar; and as there were not troops enough there to admit of small caravans being sent up to the front, and as there was also no pasturage, the stores were usually carried by the camels 4 miles from the camp beyond the sands, and here the camels were sent out to pasture till a sufficient number were collected so as to make up a caravan. Guards were furnished for the stores by a small detachment, but, owing to the want of efficient supervision, the Turkumáns used to steal cartridges and carry them off to the Atrak or into the sands for subsequent use. They usually emptied the cartridge boxes and filled them up with sand, and also stole powder charges from the artillery stores. This robbery was only noticed at the camp of Khár-Olum, to which the 10th Company of the Sámur Regiment had been sent to strengthen the escort. During the night of the 13th (25th) and 14th (26th) October, the commander of this company, Lieutenant Balicheff, while visiting his sentries, surprised a number of Turkumáns stealing cartridges. The Turkumáns (11 men) seized their arms, but were captured and disarmed.|| On inspecting all the cartridge and ammunition boxes, it was found that 18,000 cartridges and 200 powder charges were missing. General

* See Appendix No. LXIII for arrangement made with Gromoff, dated 17th (29th) October 1880.—*Author*.

† Contract with Terogánoff.—*Author*.

‡ By the contract with Gromoff the posts on the Atrak line were all to be supplied by the 15th (27th) November.—*Author*.

§ Letter from General Skobelev to Pavloff, No. 7, dated 15th (27th) October 1880 (Diary of the Staff of the Trans-Caspian Field Force, No. 12 of 1880).—*Author*.

|| Report from the Commander of the Convoy, Staff-Captain Baluyeff, No. 1 of 14th (26th) October 1880. The convoy consisted of 651 camels laden with 1,400 boxes of small-arm ammunition and 108 boxes of artillery ammunition.—*Author*.

Skobelev therefore thought it necessary to send the following proclamation to all the *kázis* and elders of the Turkumáns:—"There have lately been several cases of telegraph poles having been destroyed and of thefts by the camel-drivers of Government stores and of cartridges. The simple Turkumán people do not know that such acts are equivalent to open hostility. I consider it necessary therefore to inform you all, for communication to your fellow-tribesmen, that camel-drivers or others caught stealing cartridges or destroying telegraph poles will be shot without mercy. The Turkumáns do not know how strict are the Russian laws against such crimes, and therefore you, the *kázis* and elders of the people, must inform all the inhabitants of your *auls* of this fact and warn them to be careful, as all destruction of telegraph poles or thefts of cartridges cannot be punished otherwise than by death."*

Between the 12th (24th) and 24th October (5th November) Gromoff furnished 4,189 camels, 6 waggons, and 61 *arabas*, and on them 15,200 cwt. of stores were sent off to Duz-Olum.† As the camels were hired only to go to Duz-Olum, and as the Turkumáns would not hear of going further, the Commander of the Expedition resolved to employ the same means with them as with their predecessors in May, *i.e.*, to force them to carry the stores to Bámi. The execution of these orders was entrusted to Colonel Artsishevski, who left Chikishliar on the 22nd October (3rd November). At Duz-Olum there were concentrated:—Of the Taman Regiment of Cossacks, the 1st *sotnia* from Khwája-Kala and Társakan, the 2nd from the Micháelovsk line, the 4th from Band-Hassan, the 6th from Karája-Bátir and Yágli-Olum, and the 5th originally stationed at Duz-Olum; 6th *sotnia* of Lába Cossacks, the detachments of Cossacks which had arrived with the camels from Orenburg, and the horse mountain division. Three *sotnias* of Poltáva Cossacks (the 1st, 2nd, and 3rd) occupied Chát, Yágli-Olum, and Karája-Bátir.

On the 22nd October (3rd November), a convoy of 1,411 camels left Chikishliar, and on the 24th October (5th November) another of 1,786 camels. On the 25th (6th November) General Skobelev telegraphed to Colonel Artsishevski at Duz-Olum:—"All is ready. 3,200 camels, besides those with you, have started. All now on the road. Make arrangements (1) to seize all convoys arriving at Duz-Olum, and to send them on at once to Bámi, according to the verbal orders received from me; (2) to send notice down the line to Chikishliar to strengthen the escorts as much as possible, and, without informing them of the cause, to tell the officers commanding escorts to watch the camel-drivers narrowly and not permit them to disperse, and to bring the convoy to its destination by force, if necessary; (3) to move part of the cavalry under your orders to meet the convoys and strengthen the escorts; (4) to arrange for escorts going on to Bámi, warning the station commandants beyond Duz-Olum, so that the movement may meet with no difficulties. The arrangements for seizing the camels and feeding and looking after them to be the same as in May. Give orders all along the line for

* Diary of the Staff of the Trans-Caspian Field Force, No. 47 of 1880.—*Author.*

† Rye flour	... 7923·2 cwt.	Biscuits	... 644·48 cwt.
Rice	... 787·52 "	Buckwheat groats	... 1351·68 "
Fruit acids	... 232·32 "	Vegetables	... 105·6 "
Ghee	... 139·52 "	Sugar	... 54·4 "
Tea	... 16·32 "	Spirits	... 1421·9 gallons.
Wheat flour	... 709·12 "	Horse biscuits	... 2174·72 cwt.
Grey cloth	... 3,957 yards.	Knitted waistcoats	... 3240
Felts	... 840	Fur coats	... 360
Trousers	... 200 pairs.	Tents	... 70
<i>Kibitkas</i>	... 13	Hospital stores	... 17·28 cwt.
Ropes	... 24·96 cwt.	Packing materials	... 836 " — <i>Author.</i>

military precautions to be taken, as accidents are possible. Act mildly if possible; but if there is any fear of my plan of operations being interfered with, use the greatest energy and decision, and even resort to your arms.”*

On the arrival of the first convoy at Duz-Olum, Colonel Artsishevski proposed to the camel-drivers to go on to Bámi; but, as was to be expected, received a distinct refusal, and several Turkumáns left their animals and deserted to avoid the hated service. But on seeing the large number of troops collected, the camel-drivers could offer no resistance, and had to agree to go on the same payment as they had received for the journey from Chikishliar to Duz-Olum, *i.e.*, 3 roubles 25 kopecks per camel, *plus* 2 *kráns*. During the night some Turkumáns mutilated their camels; in a word, everything happened exactly as in the previous May.

As Colonel Artsishevski had got all the stores in the supply-depôt ready for despatch, the convoy left for Bámi the next day, the 27th October (8th November), with provisions and an escort of 3 companies and the 1st Taman *sotnia*. After the jaded and mutilated camels had been weeded out, there marched in all 1,800 animals.

After the departure of the first convoy on the 27th October (8th November), General Skobeleff left Chikishliar for Duz-Olum in a regimental waggon. The horses of the 1st Battalion of the Daghistán Regiment, which had been detailed to horse the waggon, had proved so feeble and worn out that they could not take him even to Karája-Bátir, and the Commander of the Expedition had to walk about 7 miles.† On the 29th October (10th November) he arrived at Duz-Olum with his Staff, after inspecting the troops at Karája-Bátir, Yágli-Olum, and Chát.‡

The news of the seizure of the camels spread along the line, so that the drivers of the third convoy which had left Chikishliar deserted near Yágli-Olum, taking with them 206 camels without their loads.§ This desertion was effected in the following manner. The drivers informed the commander of the convoy that there was no pasturage at the next halting place, but that they, having arms, could protect their animals if he would permit them to take the animals out to pasture a few miles off. The commander allowed this, and the drivers at once took advantage of the absence of supervision to drive their camels across the Atrak.

The stations from Chikishliar to Duz-Olum were thus completely provisioned. At Karája-Bátir 1,936 cwt., at Yágli-Olum 3,592·32 cwt., and at Chát 1,117·44 cwt. of stores had been delivered, which was sufficient to last the garrisons till the 1st (13th) July 1881. The provisioning of the points between Duz-Olum and Band-Hassan with supplies till the 1st (13th) July 1881, before the advance began, was so important that General Skobeleff ordered the contractor Gromoff to set to work to supply these places immediately after he had carried up the two months' supply of oats for the Army of Operations (about 15,200 cwt.), and to have everything ready by the 25th November (7th December).

On the formation of the Army of Operations, the following garrisons were to be left at those places:—At both Társakan and Band-Hassan one mobilized company (180 men), a detachment of artillery (25 men), a section of

* Telegram from General Skobeleff at Chikishliar to Colonel Artsishevski at Duz-Olum, dated 25th October (6th November) 1880.—*Author*.

† Instructions from General Skobeleff to the Commander of the 1st Battalion, Daghistán Regiment, No. 2010, dated 27th October (8th November) 1880.—*Author*.

‡ See Appendix LXIV.—Order of the Commander of the Expedition, No. 425, dated 31st October (12th November) 1880, on the result of his inspection of the troops.—*Author*.

§ Telegram from General Petrúsevitch to Doie, No. 7203, dated 2nd (14th) November 1880.—*Author*.

Cossacks (30 men), and 15 non-combatants of various categories—in all 250 men and 35 horses; and at Khwāja-Kala two mobilized companies (360 men), a detachment of artillery (40 men), half a *solnia* of Cossacks (60 men), and 40 non-combatants—in all 500 men and 100 horses. Khwāja-Kala was the central point between Bámi and Duz-Olum, and therefore detachments on the march had to halt at it, and receive supplies to carry them on to Bámi or Duz-Olum, while such merely passed through Társakan and Band-Hassan without a halt. The Commander of the Expedition had resolved to provide all these points with supplies over and above what were required for each garrison, but Khwāja-Kala to a greater extent (for 100 men and 100 horses) than either Társakan or Band-Hassan, at which there were only extra supplies for 50 men and 15 horses. In all three these supplies were calculated for the period from the 1st (13th) December 1880 to the 1st (13th) July 1881.

This period was arranged for because all November would be occupied in the movements of troops, whilst the normal distribution would not come into force until the 1st (13th) December. During the movement of troops to the front it was proposed to supply them at Chikishliar with provisions to last to Duz-Olum, and at that place with supplies to last till Bámi was reached, without touching those at the intermediate stations. To provision the stations between Duz-Olum and Bámi from the 1st (13th) December to the 1st (13th) July 1881, *i.e.*, for seven months, the following amount of supplies was required* :—

		Társakan. 300 men, 50 horses.	Khwāja-Kala. 600 men, 200 horses.	Band-Hassan. 300 men, 50 horses.
Provisions	...	2,725·4 cwt.	5,550·8 cwt.	2,725·4 cwt.
Oats	...	760·1 „	3,040·4 „	760·1 „
Total	...	<u>3,485·5 cwt.</u>	<u>8,591·2 cwt.</u>	<u>3,485·5 cwt.</u>

At this time none of these points had any supplies, and therefore the whole had to be brought up from Duz-Olum. For this the following means of transport were available :—(1) A convoy of 1,200 camels which had left Duz-Olum on the 27th October (8th November); (2) a convoy of 1,700 camels which had left the same place on the 29th October (10th November); (3) a convoy of 700 camels which had started from Duz-Olum on the 1st (13th) November; and (4) a convoy of 1,750 camels then on the march between Chikishliar and Duz-Olum. The first three were timed to return to Duz-Olum from Bámi on the 10th (22nd), 12th (24th), and 14th (26th) November; and, after striking off animals which had become unfit for work, they might be expected to start again with 1,000, 1,500, and 500 animals respectively. With these means, Társakan, Khwāja-Kala, and Band-Hassan were to be supplied according to the following plan :—The first convoy was to leave Duz-Olum on the 12th (24th) November, taking with it on 900 camels (100 being kept spare) all the provisions for Band-Hassan (2,725·4 cwt.), and return to Duz-Olum on the 22nd November (4th December). The second convoy was to leave Duz-Olum on the 14th (26th) November, taking 4,160 cwt. of provisions on 1,350 camels (150 being spare) to Khwāja-Kala, and return also on the 22nd November (4th December). The third convoy, leaving on the 13th (28th), would take on 400 camels (100 going spare) the remaining 1,390·8 cwt. of provisions for Khwāja-Kala, and return to Duz-Olum on the 24th November (6th December). The first two convoys on their return to Duz-Olum would have no more than 2,000

* See Appendix No. LXV.—Returns of articles required for certain posts for a period of seven months.—*Author.*

camels fit for work, and would carry upon them the oats for Band-Hassan and Társakan (760·1 cwt. for each place), and 3,040·4 cwt. for Khwája-Kala—in all 4,560·6 cwt. The third convoy would return from its second journey on the 24th November (6th December), and start again with provisions for Társakan on the 26th November (8th December) with 400 camels. Reaching that place on the 27th November (9th December), it would be back at Duz-Olum on the 29th November (11th December), and would again start for Társakan on the 30th November (12th December), arriving there on the 1st (13th) December. In two trips it would carry up all the provisions required for that place—a total of 2,726·4 cwt.*

As some of the supplies at Duz-Olum did not suffice for the provisioning of Társakan, Khwája-Kala, and Band-Hassan to the 1st (13th) July, and as, after the despatch of the above supplies, those remaining in the supply-depôt were not up to the required amount, Gromoff received orders to carry 14,912·2 cwt. of stores to Duz-Olum.†

By the beginning of November the preparatory period of the Expedition was drawing to a close, and the various blanks left in the preparations, which were unavoidable in such an expedition as that against Akhál-Tekke, had to be filled up. The most important items as ranged in the order of their urgency by General Skobelev were:—(1) magazine-stores, tarpaulins, sacks, mats; (2) *kibitkas* and *yulameikas*; (3) spirits for 7,000 men for two months at half a glass *per diem*; (4) knitted waistcoats, fur coats, and material for foot-cloths left at Krásnovodsk; (5) boots, 3,000 pairs; (6) linen from the Krásnovodsk supply-depôt; and (7) warm gloves.

General Skobelev requested General Annenkoff to move all these up to Bámi as quickly as possible without infringing upon the plan for the transport of provisions during November and December, for he considered the transport of 9,600 cwt. of provisions every month to Bámi upon Gromoff's camels as the most important factor in the success of the expedition.

At this time (*i.e.*, in the beginning of November) there were at Bámi 33,900 cwt. of provisions, 6,400 cwt. of oats, 2,000,000 rifle cartridges, and 3 complements of artillery ammunition. Between Duz-Olum and Bámi there were working 4,000 of Gromoff's camels, which, besides provisioning the *étappen* stations, had to deliver 12,800 cwt. of oats at Bámi by the 1st (13th) December. The troops of the 21st Division on the Atrak line were completely prepared for a winter campaign, except an insignificant number who had not yet received their warm clothing and new boots.

During November the transport of supplies up the Micháelovsk line by Gromoff's camels and the reserve convoys made up of Government camels which had been cured in the infirmaries was continued. Thus there arrived at Bámi on the 10th (22nd) November a reserve convoy of 392 camels with *yulameikas*, spirits, and flour; on the 14th (26th) November, 1,100 of Gromoff's camels with provisions; on the 17th (29th) November, 665 of Gromoff's camels with 5,000 pairs of boots, tarpaulins, and mats; and on the 23rd November (5th December), 175 of his camels with *yulameikas* and oats. The garrison of Bámi could not make up

* See Appendix No. LXVI.—Plan for provisioning Társakan, Khwája-Kala, and Band-Hassan (Diary of the General Staff, Trans-Caspian Field Force, Section III, 1880, No. 28, Part II.—*Author*.)

† Instructions to Intendant of the Force, Khojáyeff, No. 7283, dated 4th (16th) November 1880. See Appendix No. LXVII.—Condition of the Duz-Olum supply-depôt and of the articles sent from it to the advanced posts; also of the completion of articles deficient in it by requisitions from Chikishliar.—*Author*.

all the stores, ammunition, &c., into bales for pack transport, so quickly did they arrive. It was now time to bring over the troops which had been concentrated on the west coast of the Caspian, and were awaiting orders to leave for Trans-Caspia.

Towards the end of August reports were received from our scouts at Nukhur and from Nur-Geldi-Khán to the effect that a large body was being assembled at Gok-Tapa for a raid against our communications. The patrolling of our volunteers in the Burma gorge, where at dawn on the 24th August (5th September) 15 men came suddenly on a party of sleeping Tekkes, killed 4 of them and captured 6 rifles and 14 sabres;* and at Nukhur, whither Slavochinski had proceeded in the beginning of September, was fruitless as regards obtaining news of the enemy's intentions. Still the spies reported that a party of 600 foot and 600 horse had marched on the 3rd (15th) September along the edge of the sands towards the Micháelovsk line, and that on the 7th (19th) September some horsemen had approached Bámi from the side of the desert.

Simultaneously with the above raid, two parties were despatched to the Atrak line on the 10th (22nd) and 11th (23rd) September, of which one, consisting of 200 foot and 400 horse, under Ováz-Murád-Sirdár-Batak, moved on Band-Hassan, Khwája-Kala, and Márgis, while the other 300 horse, under Kul-Bátir-Sirdár, marched on Bek-Tapa and Khár-Olum.† The movements of these parties will be alluded to further on.

For reconnoitring purposes and to carry out the destruction of the line of wells between Kára-Sangir and Yegyán-Kazákh, as ordered by General Skobeleff, in order to increase the difficulties of the raiding party moving on the Micháelovsk line, Colonel Verjbitski sent a force under Slavochinski into the desert. Late in the evening of the 10th (22nd) September, Slavochinski left Bámi for Koj and Kára-Sangir with the 4th *sołnia* of Taman Cossacks (70 sabres), and ordered a detachment of 60 infantry volunteers to march from Bámi on the 12th (24th) to the Niáz wells, which he hoped to reach on that day after destroying the wells of Kára-Sangir, Demirján, and Daulat. Before dawn on the 11th (23rd) September, when about 2 miles from the wells of Kára-Sangir, the horses of the *sołnia* began to neigh, and in answer was heard the neighing of horses at the wells. Concluding from this that the enemy was at Kára-Sangir, Slavochinski quietly dismounted the *sołnia* and brought them close up to the enemy's bivouac, where a volley was fired among the sleeping Tekkes. The latter at once took to flight, leaving behind them 12 bodies, 20 rifles, 25 sabres, many saddles, and a quantity of provisions. When, however, day broke, the Tekkes, seeing how small the force was, recovered themselves and approaching the horseholders, tried to surround them. Slavochinski destroyed the captured rifles, burnt the saddles and provisions, and began his retreat, firing with dismounted skirmishers. The enemy consisted of both horse and foot, and numbered some 800 men. They followed the *sołnia* about 3 miles, but the latter arrived safely at Bámi at 8 A.M., having lost 2 Cossacks wounded and 2 horses killed.

Thinking that the hostile party would either retire on Gok-Tapa or lie in wait for our convoys, at 3 P.M. on the 11th (23rd) Colonel Verjbitski sent out a column composed of the 1st Company of the Sámur Regiment, a section of Cossacks of the 3rd Taman *sołnia*, and a gun of the 4th Battery 20th Brigade under Lieutenant-Colonel Prince Mahaloff, towards Niáz, where it was hoped to surprise the band if they moved. Slavochinski's flying column marched during the night *viâ* Koj to Kára-Sangir, while the detachment of volunteers was

* Colonel Verjbitski's Report, No. 68, dated 27th August (8th September) 1880.—*Author*.

† Colonel Artsishevski's Report, No. 12, dated 2nd (14th) October 1880.—*Author*.

ordered to watch the rocky gorge between Bámi and Koj, as a large convoy was expected to march on the 12th (24th) September from Khwája-Kala to Band-Hassan. Both columns were provided with heliographs.

Prince Mahaloff arrived at Niáz late in the evening of the 11th (23rd) September, and found there funeral piles, the corpse of a Tekke who had evidently died from wounds received at the affair of Kára-Sangir, and other traces of the band, which had just moved off towards the wells of Yegyán-Kazákh. The column halted for the night at the wells, and here found supplies not only of barley, but even of hay. From all this it was evident that the Tekkes had recently been in full possession of the spot. In the meantime Slavochinski, having sent the detachment of infantry into the hills, left Bámi at midnight with the 4th *sotnia* of Taman Cossacks, and after a long halt at Koj, where he did not find the volunteers, who should have been at that place, he moved to Kára-Sangir. Here he found a party of Tekkes on the scene of the action of the previous day. He then halted and sent a report of the presence of a large body of the enemy at the wells. On receiving this report at 4 P.M., Colonel Verjbitski at once sent orders to Prince Mahaloff to march from Niáz on Kára-Sangir, and he also moved to the same place from Bámi a column composed of the 15th Company of the Apsheron Regiment, one gun of the 4th Battery, 20th Brigade, and 20 Cossacks under Colonel Artsishevski, who was ordered to take command of all the troops when concentrated. The Tekkes, however, having already heard of the presence of our column at Niáz, hastened to make good their retreat. Slavochinski having rested at Kára-Sangir, destroyed the well in the evening* and moved on Kizil-Arvat to meet the convoy. The columns of Prince Mahaloff and of Colonel Artsishevski arrived at Kára-Sangir late in the evening of the 12th (24th), opened the well, and on the 13th (25th) returned to Bámi.

Colonel Verjbitski intended soon to make a reconnaissance to Niáz and Kára-Sangir to destroy the well at the latter place, which lay very near our line of communications.†

The parties of Ováz-Murád-Sirdár-Batak and of Kul-Bátir-Sirdár, which had moved against the Atrak line, met with no success. They approached Band-Hassan during the night of the 13th (25th) and 14th (26th) September, and on that of the 14th (26th) to the 15th (27th) were close to Khwája-Kala, where they wounded a private of the Shirván Regiment. On the night of the 15th (27th) and 16th (28th) they made an attempt against Márgis, where the 9th Company of the Shirván Regiment was setting up telegraph poles, and on the 17th (29th) at the ruins of Chukhur-Kala (on the road between Khwája-Kala and Band-Hassan) they fired on our convoy, and near Chát carried off some sheep belonging to the meat contractor, but were driven away by some Cossacks of the 5th Taman *sotnia*.‡ Finally, the parties shewed themselves at Bék-Tapa, Khár-Olum, and Yágli-Olum.§

As soon as Colonel Verjbitski heard of the preparations made at Gok-Tapa towards the end of August and the beginning of September, he hastened to inform Colonel Navrotski, and he accordingly arranged that the escorts should accompany the convoys to a point half-way, or between Kázanjik and Bála-Ishem, being there relieved by another escort from the end of the stage.||

* In his report Colonel Verjbitski calls the destruction of the well inopportune.—*Author*.

† Colonel Verjbitski's Report, No. 298, dated 21st September (3rd October) 1880.—*Author*.

‡ Colonel Artsishevski's Report, No. 12, dated 2nd (14th) October 1880.—*Author*.

§ Skobelev's telegram, No. 6723, dated 20th October (1st November) 1880.—*Author*.

|| On the arrival of a convoy at Bála-Ishem or at Kázanjik on the way back it was given a day's halt. During the halt *jigits* were sent to the next station to announce its march, and then an escort was sent out from that place, which met the convoy at Akhcha-Kuima.—*Author*.

Besides securing the convoy from hostile attacks, this system had the benefit of lightening the work of the escort, which only had to march half the distance.* The flying detachment under Lieutenant Kaiboff was used to strengthen the escorts of the convoys on the Michálovsk line.

The party of volunteers who had been watching the environs of Tásh-Arvat-Kala had discovered no signs of the enemy there, but on the 14th (26th) September in broad daylight a large party of Tekkes made an attack on Kazánjik. The garrison consisted of half of the 1st company of the Shirván Regiment and two light guns; but on that day there had arrived the flying detachment under Lieutenant Kaiboff, consisting of the 11th company of the Shirván Regiment and 15 Cossacks of the 5th Poltáva *sotnia*. The commandant of the post was Captain Kandalaki, of the 1st company Shirván Regiment. The affair thus began. Soon after mid-day small groups of Tekkes came in sight of Kazánjik from the east, and these were soon followed by considerable bodies, whose evident intention was to seize the wells lying near the lower fort. Captain Kandalaki sent Lieutenant Kaiboff to occupy the heights above the wells, and after a skirmish lasting two hours, the enemy drew off at 5 P.M. In the twilight, however, they crept up through ravines, occupied a hill commanding the fort, whence they opened fire. Captain Kandalaki then sent out two sections of the 1st and 11th companies to occupy a hill commanding that in possession of the enemy, who was thus forced to leave his position. During the night our troops remained on the hill which they had occupied, and, on patrols being sent out next morning, no traces of the enemy were found. The affair had cost us two privates wounded.† Thus all the attacks of the enemy were successfully repulsed, and from the 11th (23rd) to the 19th September (1st October) we only lost 1 man killed and 6 wounded.‡ According to reports received, the total strength of the Tekke bands which left Gok-Tapa about the 10th (22nd) September, both in the direction of the desert and in that of the hills, was not much above 1,000 men, most of whom were inhabitants of the villages between Bámi and Gok-Tapa.

The raids of the Tekkes during the past three months had taken place periodically at intervals of about three weeks, *viz.*, in the beginning of July, towards the end of July, on the 19th (31st) August, and between the 10th (22nd) and 14th (26th) October. After each attack the Tekkes had returned to Gok-Tapa to fill up their supply of provisions. It was, therefore, expected at Bámi that towards the end of September the enemy would make renewed attempts upon our lines. The last raid caused the Commander of the Expedition to make the following dispositions:—

- (1) At Kazánjik a volunteer detachment of 60 men was formed from the 1st Battalion of the Shirván Regiment to observe the environs. For this purpose 40 privates and 4 non-commissioned officers, detailed from the battalion for the volunteer detachment at Tásh-Arvat-Kala, were sent up to Kazánjik,§ and to them were added five men from each company of the battalion and 30 Kirghiz *jigits*.

* Report from Colonel Navrotski to General Skobeleff, No. 46, dated 10th (22nd) September 1880.—*Author*.

† There were expended in all 1,316 rounds of infantry and 15 of artillery ammunition.—*Author*.

‡ Colonel Artishevski's Report, No. 12, dated 2nd (14th) October 1880.—*Author*.

§ Instead of these a volunteer detachment of three non-commissioned officers and 30 men was formed by three companies of the 3rd Apsheron Regiment (G. O. No. 317, dated 19th September (1st October) 1880).—*Author*.

- (2) Colonel Navrotski was ordered to send all reports from the front to the Commander of the Expedition, so that the latter might be kept well informed of the state of affairs.*
- (3) Colonel Verjbitski was reminded that at the beginning of the cold weather and the rains, and when the nights began to get dark and long, the Tekkes usually undertook their raids; and he was therefore recommended to exercise extra caution at the beginning of the rainy season, and at every new moon.† He was ordered to telegraph the state of affairs daily to Krásnovodsk.‡
- (4) Stone *fougasses* were constructed at Bámi, Band-Hassan, and Khwája-Kala.
- (5) At Khwája-Kala as many trees were cut down as were necessary to clear the surrounding ground for rifle fire.§
- (6) Colonel Artsishevski was again ordered on no account to interfere with the Yamút-Turkumáns on the right bank of the Atrak.||
- (7) It was strictly forbidden to allow officers and officials to travel up the Atrak line without escorts.¶

On the 19th September (1st October) a Nukhurite brought news to Bámi that a Nukhur caravan with 40 men going to Bámi had been attacked by Tekkes at Burma. Colonel Verjbitski at once sent half of the 3rd *sotnia* of Taman Cossacks with one gun under Captain Polkovnikoff to Burma, and after them half of the Krásnovodsk company. The Tekkes, about 150 strong, were skirmishing with the Nukhurites across a canal, but on the appearance of the Cossacks they withdrew towards Archmán, and the approach of darkness caused our troops to return to Bámi. The Nukhurites had lost 7 men killed, 3 wounded, and 1 prisoner. The Tekkes left two bodies on the scene of action. The caravan was saved and brought into Bámi, and the wounded Nukhurites were sent to hospital. After their stores had been sold, our allies were taken back to their homes by an escort.

On the same day, 100 Tekke horsemen attacked Nukhur itself, but were repulsed with a loss of 2 wounded and 1 prisoner, the Nukhurites themselves losing 2 wounded and 4 horses.**

At the end of September, contrary to all our expectations, no large parties of Tekkes appeared on our lines of communication, but small bands were continually prowling about in the broken ground near Bámi and Burma; and almost every night men almost naked, with swords in their teeth, crept near the chain of outposts and tried to cut down our sentries and patrols. Sometimes on dark nights single men would try to glide between the sentries and reach the *kibitkas* to steal arms, but the excellent execution of our outpost service made such attempts difficult, and several Tekkes paid for their daring with their lives. The garrison of Bámi, however, lost three men wounded during September in such night affairs, of which the following may serve as an example:—At 2 A.M. on the 30th September (12th October) a patrol of two men of the Krásnovodsk company, while visiting the chain of sentries in front of

* Instructions to Colonel Navrotski, No. 5009, dated 9th (21st) September 1880.—*Author*.

† Telegram to Colonel Verjbitski, No. 1403, dated 7th (19th) September 1880 (Instructions to Commander of Atrak line, No. 5469, dated 18th (30th) September 1880).—*Author*.

‡ Telegram to Colonel Verjbitski, No. 506, dated 11th (23rd) September 1880.—*Author*.

§ Instructions to Commandant of Atrak line, No. 5338, dated 17th (29th) September 1880.—*Author*.

|| Telegram to Colonel Artsishevski, No. 5421, dated 19th September (1st October) 1880.—*Author*.

¶ Telegram to Colonel Engbrecht, dated 12th (24th) September 1880.—*Author*.

** Colonel Verjbitski's Report, No. 298, dated 21st September (3rd October) 1880.—*Author*.

Bámi, after the moon had set came upon three perfectly naked Tekkes lying in a hole amongst the rocks. The Tekkes attacked the patrol, wounded the whole of them, and took away their arms, making off when the next double post came up to the rescue.* When General Skobeleff received news of this, he telegraphed to Colonel Verjbitski:—"Inquiry must at once be made as to how two rifles came to be captured from the Krásnovodsk company by the Tekkes. The result is to be laid before me, so that a Court-Martial may be held if the men have not performed their duty as honourable soldiers. Explain to the Krásnovodsk company that as this is the third time it has committed a military crime, it will be moved to Mulla-Kári instead of to Gok-Tapa. This is to be read on parade."†

In the beginning of October the distribution of the troops in Trans-Caspia was as follows‡:—

<i>Kizil-Arvat.</i> (1 company, 2 guns).	{	16th company Apsheron Regiment. 1 division, 6th Battery, 21st Brigade. (Kaiboff's flying column, 11th company Shirván Regiment, 15 Cossacks of 5th <i>sotnia</i> Poltava Regiment.)
<i>Kazánjik</i> (1 company, 2 guns).	{	1st company Shirván Regiment. 1 division, 6th Battery, 21st Brigade.
<i>Bála-Ishem</i> (1 company, 2 guns).	{	2nd company Shirván Regiment. 1 division, 6th Battery, 21st Brigade.
<i>Kutul</i> (1 company) ...		3rd company Shirván Regiment.
<i>Mulla-Kári</i> (5 companies, 3 <i>sotnias</i> , 3 guns).	{	1st Railway company. 2nd Krásnovodsk company. 4th company Shirván Regiment. 9th and 10th companies Apsheron Regiment. 5th <i>sotnia</i> Poltava Cossacks. 2nd <i>sotnia</i> Taman Cossacks. 6th <i>sotnia</i> Lába Cossacks. 1 division, 6th Battery, 21st Brigade.
<i>Micháelovsk</i> (1 company) ...		2nd Railway company.
<i>Tásh-Arvat-Kala</i> ...		Volunteer Detachment under <i>Yesaul</i> Tserenjálóff.
<i>Krásnovodsk</i> ...		Parts of 1st, 3rd, and 4th companies, Krásnovodsk Battalion.
<i>Wells of Burnák and Kábil</i> (1 company).	{	11th company Apsheron Regiment.
<i>Kindarli</i> and on road thereto (1 company, 6 <i>sotnias</i>).	{	1 company Alexandrovsk Local Detachment. 1st, 2nd, and 3rd <i>sotnias</i> , 5th Orenburg Cossacks. 1st and 2nd <i>sotnias</i> , 1st Ural Cossacks. 5th <i>sotnia</i> , Lába Cossacks.
<i>Fort Alexandrovsk</i> ...		Parts of Alexandrovsk Local Detachment.
<i>Chikishliar.</i> (2 companies, 3½ <i>sotnias</i> , 4 guns, 1 company Fortress Artillery).	{	3rd company Daghistán Regiment. 12th company Apsheron Regiment. § 1st, 2nd, and 3rd <i>sotnias</i> Poltava Cossacks. 6th <i>sotnia</i> (1 section) Taman Cossacks. 3rd company Gunib Fortress Artillery. Horse Mountain Division. 2 Mitrailleuses.

* Report of the officer of the day of the Bámi Garrison, Staff Captain Vasiliyeff, No. 949, dated 30th September (12th October) 1880.—*Author*.

† General Skobeleff's telegram, No. 6723, dated 20th October (1st November) 1880.—*Author*.

‡ For numerical strength of the Russian Forces in Trans-Caspia on 1st (13th) October 1880, see Appendix No. LXVIII.—*Author*.

§ Arrived 3rd (15th) September from west coast with 2 officers and 186 men. With it came also the band of the Sámur Regiment, 29 strong.—*Author*.

<i>Karāja-Bâtir.</i> (1 company, $\frac{1}{4}$ <i>sotnia</i>).	{ 1st company Daghistán Regiment. 1 section, 6th <i>sotnia</i> , Taman Cossacks.
<i>Yágli-Olum.</i> (1 company, $\frac{3}{4}$ <i>sotnia</i>).	{ 4th company Daghistán Regiment. Half of 6th <i>sotnia</i> , Taman Cossacks. 1 section, 5th <i>sotnia</i> , Taman Cossacks.
<i>Chút.</i> (1 company, $\frac{1}{4}$ <i>sotnia</i> , 1 gun).	{ 2nd company Daghistán Regiment. 1 section, 5th <i>sotnia</i> , Taman Cossacks. 1 Mitrailleuse.
<i>Duz-Olum.</i> (4 companies, $\frac{1}{2}$ <i>sotnia</i> , 1 gun).	{ 3rd Battalion, Sámur Regiment. Half of 5th <i>sotnia</i> , Taman Cossacks. 1 Mitrailleuse.
<i>Társakan.</i> (3 companies, $\frac{1}{2}$ <i>sotnia</i> , 1 gun).	{ 9th, 10th, and 12th companies Shirván Regiment. Half of 1st <i>sotnia</i> Taman Cossacks. 1 mountain gun of Reserve Division of 6-21st Brigade.
<i>Khwāja-Kala</i> (4 companies, $\frac{1}{2}$ <i>sotnia</i> , 5 guns).	{ 4th Battalion, Daghistán Regiment. Half of 1st <i>sotnia</i> , Taman Cossacks. 2 Mitrailleuses. 2 4-pounder guns. 1 mountain gun of Reserve Division of 6-21st Brigade.
<i>Band-Hassan.</i> (4 companies, 1 <i>sotnia</i> , 4 guns).	{ 3rd and 4th companies Sámur Regiment. 14th company Apsheron Regiment. Detachment of Volunteers. 4th <i>sotnia</i> , Taman Cossacks. 2 Mitrailleuses. 2 4-pounder guns.
<i>Bámi.</i> (6 companies = 700 bayonets, 1 <i>sotnia</i> = 96 sabres, 37 guns).	{ Sapper company. Mixed company, Krásnovodsk Battalion. 1st and 2nd companies Sámur Regiment. 13th and 15th companies, Apsheron Regiment. 3rd <i>sotnia</i> , Taman Cossacks. 4th Battery, 20th Brigade. Naval Battery. 1st, 2nd, and 3rd Mobile Batteries.

The garrison of Bámi, which was engaged in heavy work in the supply-dépôts and in the construction of a fortified camp, had been kept purely on the defensive; but in the beginning of October, as it appeared to be highly necessary, three columns were told off from it—two to destroy the wells in the desert, and one to relieve Nukhur, which was being invested by Taghma-Sirdár.

From the 1st (13th) to the 6th (18th) October, Slavochinski's flying column and that commanded by Lieutenant Shtshekin, and composed of the 1st company Sámur Regiment and half of the 3rd *sotnia* of Taman Cossacks, destroyed the wells of Kára-Sangir, Demirjân, Daulat, Niáz, Rajab, and Yegyân-Kazákh, so that the sands were made waterless for a stretch of nearly 70 miles. It was thought that the advance of bands against the Micháelovsk line would thus be rendered difficult, as the only points at which they would water their horses, Burma and Koj, were constantly patrolled by our volunteer detachments. Slavochinski's flying column on returning from its expedition into the sands was broken up, because the 4th *sotnia* of Taman Cossacks required rest. The *sotnia* was incorporated with the Band-Hassan garrison, and Sub-Lieutenant Voropánoff, of the Apsheron Regiment, was named commander of the infantry volunteers.*

* General Order, Advanced Force, No. 59, dated 1st (13th) October 1880.—*Author.*

On the return of the columns from the desert, Colonel Verjbitski had intended to undertake an expedition against Durun, where, according to our spies, large flocks of the Tekkes' sheep and camels were feeding, and had asked the permission of the Commander of the Expedition,* but General Skobelev, "in view of the difficulty of our position," forbade Colonel Verjbitski to make any movement.†

All the attempts made by the Tekkes against our positions having failed, they turned their attention to Nukhur and to our communications with Bujnurd. They had several times driven off the cattle of Nukhur, had plundered the caravans going to that place from Bujnurd, and had dug out the wheat from the holes in the fields of Nukhur. On the 7th (19th) October, Taghma-Sirdár with a large body of horsemen drove away 2,000 sheep and a caravan with 100 loads coming from Bujnurd in full view of the place. With the latter, 40 Kurds and Nukhurites were captured and 10 men killed, but the rest succeeded in escaping to Nukhur. After that Taghma-Sirdár advanced close up to the village and took up a position on its south side, while footmen came up from Archmán and occupied the defile to the north, thus blockading Nukhur. Taghma-Sirdár then proclaimed his intention of razing the village to the ground and carrying off its inhabitants to Gok-Tapa.

On receiving this news, Colonel Verjbitski sent out on the 9th (21st) October a column composed of the 3rd company Sámur Regiment, a detachment of volunteers, and a few Cossacks under Lieutenant-Colonel Haidaroff from Band-Hassan. The party reached Nukhur on the 10th (22nd). On seeing the Russians, the Tekkes at once withdrew towards Gok-Tapa. The inhabitants received our troops as their deliverers, wept, kissed the hands of the soldiers, and asked that a company should be left with them, promising to feed it at their own cost. Haidaroff, however, returned to Bámi on the 12th (24th) October.

After the relief of Nukhur by our troops, the Advanced Force had constant skirmishes with the enemy all through October. On the 10th (22nd), Cornet of Cossacks Chigirin with 50 Cossacks of the 3rd *sotnia* Taman Regiment, while foraging at Koj, had a skirmish with the Tekkes, which resulted in the latter retiring, leaving 7 bodies on the field. On the 17th (29th), ten volunteers after a skirmish‡ captured at the same place 12 camels bearing our own brands. On the 21st October (2nd November), the men of the 14th company Apsheron Regiment, engaged in setting up telegraph poles between Bámi and Band-Hassan, at $4\frac{2}{3}$ miles from Bámi, observed some Tekkes on the heights near the road. The Commander of the company, Sub-Lieutenant Chikareff, followed them up and thought he saw only two men, but next day, having been sent out on patrol with half a company, he discovered in a deep and inaccessible defile, $4\frac{3}{4}$ miles from Bámi, the camp of the party, which was not only well supplied with provisions, but had even *kibitkas*, all of which he burnt. On the 22nd October (3rd November), 17 men of the 3rd and 4th companies of the Sámur Regiment were sent up the valley from Band-Hassan to cut firewood.

At 2 P.M. a considerable hostile party, taking advantage of the thick fog, threw themselves upon the sentry and killed him, but not till after he had fired

* Colonel Verjbitski's Report, No. 448, dated 2nd (14th) October 1880.—*Author*.

† Telegram from General Skobelev to Colonel Verjbitski, No. 6424, dated 8th (20th) October 1880.—*Author*.

‡ It appeared that the Tekkes concealed themselves near Koj, where the camel convoys used to halt for the night. Here they collected the camels abandoned by us as useless and took them into the desert, where they recovered.—*Author*.

three shots and alarmed his comrades. The latter assembled near their carts and opened fire, sending meanwhile a mounted man into Band-Hassan with the news. Upon the arrival of a reinforcement the Tekkes retired. Our loss was only one man killed. Just before dawn on the 23rd October (4th November), a large party of horsemen, who had bivouacked at the *aul* of Bámi, $\frac{3}{4}$ mile from our camp, made an attack from three sides upon our chain of sentries. One of our men, having followed two Tekkes who had attacked the sentries, was wounded, and next day two Tekke swords, covered with blood, were found.* On the 27th October (8th November), a party of volunteers had a skirmish at Band-Hassan in which a Tekke was killed; and another party, which had been sent on a reconnaissance towards Nukhur, observed a large body of the enemy at $16\frac{3}{4}$ miles from Band-Hassan passing through the defiles between Bámi and Kesri, *i.e.*, on the road from Bujnurd to Nukhur. As the Nukhurites had notified that a caravan of 500 camels with an escort of 200 Kurdish horsemen would shortly leave Bujnurd for Band-Hassan, Petrúsevitch gave orders for Voropánoff to be sent at once to the Bujnurd road to protect the caravan from the threatened danger, and in case of necessity to escort it. Voropánoff left Bámi on the 30th October (11th November) with four days' rations, and on the 31st October (12th November) arrived at Nukhur, where he obtained guides and replenished his meat rations. As a support to his party, the volunteer detachment from Társakan was moved up the Sumbár valley to Kesri, as were also some *jigits* from Khwája-Kala. On the 1st (13th) November, Voropánoff marched from Nukhur to Kesri, and the Nukhurite horsemen advanced on the Bujnurd road; but no enemy was met with, and the volunteers returned to Band-Hassan and Társakan. The Nukhurites declared that the Tekkes, seeing that they were expected in the villages of Bujnurd, had returned to Gok-Tapa; but it appeared that no caravan had left Bujnurd, and that the Nukhurites had only made up the story to bring Russian troops into the vicinity of their village, as they had frequently requested Colonel Verjbitski to send some, and had said that, if none were sent, they would be forced to leave Nukhur. Colonel Verjbitski confined himself to promising them help in case of need.

In the middle of October, three *sotnias* of the 5th Orenburg Cossacks† and the 5th *sotnia* of Lába Cossacks arrived at Krásnovodsk from Kindarli with the last *échelons* of Orenburg camels, also a company of the Alexandrovsk local detachment, which was brought thither by sea. The Orenburg *sotnias* and the 5th *sotnia* of the Lába Regiment were formed into a mixed regiment under Lieutenant-Colonel Mohrenschild and sent up to Bála-Ishem, where they remained till the end of October. Both of the Ural *sotnias* were sent by steamer to Astrakhán. During October everything was quiet on the Atrak and Micháelovsk lines.

On the departure of the Commander of the Expedition and his Chief of the Staff for the Atrak line,‡ General Annenkoff was, by General Order of the 9th (21st) October, appointed Officer Commanding the Lines of Communication, and the Commandant of the Atrak line and all the authorities and

* Telegrams from Colonel Verjbitski, Nos. 791, 848, 865, and 915, dated 22nd, 24th, 25th, and 27th October (3rd, 5th, 6th, and 8th November) 1880.—*Author*.

† Strength—13 officers, 374 men, 443 troop horses, and 39 pack horses (Lieutenant-Colonel Mohrenschild's Report, No. 1533, dated 14th (26th) November 1880).—*Author*.

‡ On the 11th (23rd) October, General Skobelev went from Krásnovodsk to Chikishliar, and Petrúsevitch with the 6th *sotnia* of Lába Cossacks marched by the Micháelovsk line for Bámi, where he arrived on the 26th October (7th November) to verify the supplies of provisions. Thence he went to Duz-Olum, and arrived there on the 29th October (10th November) at the same time as General Skobelev came in from Chikishliar.—*Author*.

administrations at Chikishliar and Krásnovodsk and on the Atrak and Micháelovsk lines were placed under his orders. To General Annenkoff was also entrusted the administration of the Trans-Caspian Military District and the superintendence of the Micháelovsk line, the latter in the event of Colonel Navrotski being called up to the Advanced Force.*

By the beginning of October 10,000 camels were at work on the Micháelovsk line and at Krásnovodsk, and the 5th *échelon* of Orenburg camels was still expected. The Commander of the Expedition was, therefore, confident that by the 20th October (1st November) 4½ months' supplies would be gathered at Bámi for the Advanced Force. Accordingly, on the 9th (21st) October, General Skobelev requested the Commander-in-Chief of the Army of the Caucasus to concentrate the following troops at Petrovsk, and to begin their transport to Trans-Caspia on the 21st October (2nd November):—6 battalions 19th Infantry Division, 2 batteries 19th Artillery Brigade, 1 battery 21st Artillery Brigade, a division (2 squadrons) of Dragoons, the 45th Divisional Ammunition Column, the divisional field hospitals of the 19th and 21st Infantry Divisions, and 200 carts for the conveyance of the sick.† The battalions of the 19th Infantry Division‡ and the batteries of the 19th Brigade left Vladikavkaz in five *échelons* for Petrovsk, the Crimean Regiment forming two, the batteries one, and the Stavropol Regiment two *échelons*, the first of which arrived at Petrovsk on the 5th (17th) October, the last on the 18th (30th) October.§ The division of Dragoons had arrived at Temir-Khán-Shura on the 4th (16th) September, and the 45th Divisional Ammunition Column and the 1st Battery 21st Brigade were already at Petrovsk.

Of these troops, there were to be transported to Chikishliar the three battalions of the Crimean Regiment with their transport, two squadrons of Dragoons, the half mortar battery, and 100 carts for the sick; and to Krásnovodsk the three battalions of the Stavropol Regiment and 2½ batteries with their transport, the 45th Divisional Ammunition Column with 120 ammunition waggons,|| the divisional field hospitals, and 100 carts for the sick.

The arrangements for the transport by sea were left to General Annenkoff, who was ordered to have them completed, if possible, by the 10th (22nd) November, the infantry being brought over first; then the Dragoons and 100 carts to Chikishliar; then the artillery and the ammunition column; and, lastly, the field hospitals and 100 carts to Krásnovodsk.¶

The infantry were to replace the troops of the 21st Division on the lines of communication, 8 companies or two battalions each from the Crimean and Stavropol Regiments being so employed.** The remaining battalions of those

* General Orders Trans-Caspian Field Force, Nos. 370 and 377, dated 9th (21st) and 10th (22nd) October 1880. See also, in Appendix LXIX, Skobelev's letter to Annenkoff, dated 10th (22nd) October 1880, No. 6527.—*Author*.

† Telegram from General Skobelev, No. 6475, dated 9th (21st) October 1880.—*Author*.

‡ To strengthen his transport, General Skobelev requested that the battalions of the 19th Division should be provided with carriage and spare horses on the same scale as the battalions sent to the east coast of the Caspian in 1879, i.e., 15 waggons and 1 hospital cart per battalion (Telegram from General Skobelev to the Chief of the Staff, Caucasus Military District, No. 1289, dated 2nd (14th) September 1880). The battalions were therefore ordered to take with them each 13 three-horsed waggons and 13 two-horsed carts (Telegram from General Lázareff, No. 2294, dated 7th (19th) September 1880).—*Author*.

§ Telegram from Tomiloff, No. 4060, dated 11th (23rd) September 1880.—*Author*.

|| Of which 40 4-wheeled horses and 80 2-wheeled were without horses.—*Author*.

¶ Troops disembarked at Krásnovodsk were to be sent up as soon as possible to Mulla-Kár on account of the scarcity of water at the former place.—*Author*.

** Of the Stavropol Regiment, ½ company at Mulla-Kári, 1½ companies at Bála-Ishem, 2 companies at Kazanjik, 1 company at Kizil-Arvat, 2 companies at Khwája-Kala, and 1 company at Band-Hassan. Of the Crimean Regiment, 3½ companies at Chikishliar, ½ company at Karája-Batir, 1 company at Yágli-Olum, 1 company at Duz-Olum, and 1 company at Társakan.—*Author*.

regiments were to be sent up to Bámi to form part of the Army of Operations, as was also the Trans-Caspian Local Battalion newly formed out of two companies of the Alexandrovsk Local Detachment,* the mixed company of the Krásnovodsk Local Battalion already with the Advanced Force, and the 2nd company of the same battalion which had been on active service since the 5th (17th) April 1880. All the artillery, the 45th Divisional Ammunition Column, and the divisional field hospitals were also to be sent up to Bámi, the unhorsed two-wheeled carts of the former being transported to Bámi by the horses of the four-wheeled waggons after the latter had been taken up by their own horses, which would be sent back for this purpose to Mulla-Kári. The divisional field hospitals were to be carried on Gromoff's camels, or on camels to be told off from the Government transport; and the infantry baggage was to be brought up by their own transport.†

In view of the projected active operations, the Commander of the Expedition thought it necessary to place limits to the amount of personal baggage for which transport was to be provided, as a superfluity of this would absorb carriage required for more necessary stores, and laid down the following scale of baggage to be taken with the troops :—

Generals	...	...	...	lbs.
Commanders of corps. &c.	...	...	... each	722
Field officers, medical officers of chaplains	...	...	... "	541·5
Company officers and officials of similar rank‡	...	...	... "	301
Soldiers§	...	...	... "	180·5
			... "	36·1

On the above basis the following numbers of camels were told off to each unit :—

(1) <i>Per company.</i>				Camels.
For officers' baggage	...	...	...	2
For men's baggage (company @ 150 men)	...	...	...	19
For cooking utensils; office, &c.	...	...	...	3
Total			...	24

(2) <i>For the Staff of a battalion.</i>				
For officers' and officials' baggage	...	...	...	6
For battalion office	...	...	...	2
For medical stores	...	...	...	1
Total			...	9

* One company of this detachment had occupied the post at Kindarli Bay since July, as mentioned above, till all the Orenburg camels had reached Krásnovodsk. The other, of a strength of 5 officers and 100 men, had been sent from the fort to Krásnovodsk on the 26th October (7th November) in a schooner of the Caucasus and Mercury Company (General Order, Trans-Caspian Field Force, No. 278, dated 11th (23rd) September 1880).—*Author.*

† Instructions to the Officer Commanding Lines of Communication, No. 6505, dated 9th (21st) October 1880.—*Author.*

‡ "Be careful that officers take the field with the regulation baggage, and that the march of the troops does not resemble that of the Alani or Visigoths" (Letter from Skobelev to Annenkoff, No. 2115, dated 7th (19th) November 1880).—*Author.*

§ Fur-coat, uniform, 4 changes of linen, 3 pairs of foot-cloths, 2 towels, 2 pairs of boots, grease-box and grease, comb, soap, tobacco, and materials for cleaning arms.—*Author.*

(3) *For the Staff of a regiment.*

Camels.

For officers', classed officials', and chaplains' baggage	...	...	11
For regimental office	...	...	1
For medical stores	...	...	1
Total	...	...	13

(4) *Per sotnia and squadron.*

For officers' baggage	...	...	...	3
For cooking utensils, &c.	...	...	...	3
Total	...	...	...	6*

(5) *Per battery.*

For officers' baggage	...	...	...	6
For men's baggage	...	...	...	20
For cooking utensils, office, &c.	...	...	...	3
For medical stores	...	...	...	1
Total	...	...	...	30

(6) *Per divisional ammunition-column.*

For officers' baggage	...	...	...	6
For men's baggage	...	...	...	10
For cooking utensils, office, &c.	...	...	...	3
For medical stores	...	...	...	1
Total	...	...	...	20

The order stated that on no account was any greater amount of baggage or any more transport than that laid down above to be allowed. "I warn all commanders of corps and all officers," ran the order, "that on taking the field I will personally inspect everything; and if any superfluous personal baggage or transport is found, such will be destroyed, and the offending officers will be sent to the rear."[†]

The Commander of the Expedition requested General Annenkoff to use every endeavour so that the troops might be concentrated at Bámi by the 25th and 28th November (7th and 10th December), as, firstly, a vague rumour had been heard that reinforcements were coming from Marv with artillery to join the Tekkes; and secondly, that the rains, which would seriously impede our movements, usually begin in the end of December or in January.

Although General Skobelev desired the troops to be hurried forward, he still wanted them to arrive fully equipped for a winter campaign, and therefore requested the Officer Commanding the Lines of Communication to inspect in detail each unit of the 19th Infantry Division and 19th Artillery Brigade as it arrived at Micháelovsk.‡ In case of deficiencies or of articles being in bad order, the Commander of the Expedition authorized General Annenkoff to demand

* The men's kits are carried by themselves.—*Author.*

† General Order, Trans-Caspian Field Force, No. 373, dated 10th (22nd) October 1880.—*Author.*

‡ They were to be provided with uniform, great-coats, hoods, fur-coats, 2 pairs of boots, not less than three changes of linen, knitted waistcoats, and warm foot-cloths; their arms, ammunition, and cartridge boxes were to be in good order, as also their entrenching tools (80 shovels and 20 axes per company), stretchers, bandaging material, cooking utensils, biscuit bag, carriages, harness, and horses.—*Author.*

their replacement from the Staff of the Military District, but at the same time he was to take energetic measures to make good deficiencies as quickly as possible from the extraordinary sums at his disposal.*

On the 6th (18th) October the half-mortar battery of the 1st Battery 21st Brigade arrived at Chikishliar with 1 officer, 67 men, six 18-lb. mortars, and 1,000 shells.† On the 28th October (9th November), the troops from the west coast of the Caspian began to arrive as follows:—

- (1) At Chikishliar:—28th October (9th November) 9th and 10th companies Crimean Regiment (5 officers, 325 men); 2nd (14th) November, 11th, 12th, and non-combatant companies (7 officers and 403 men); 6th (18th) November, 4th, 5th, and 6th companies (9 officers, 459 men); 8th (20th) November, 1st, 2nd, 3rd, 7th, and 8th companies of the same regiment (20 officers, 760 men) and the division of the 15 (Tver) Dragoons (10 officers and 399 men).
- (2) At Micháelovsk:—9th (21st) November, 9th and 10th companies Stavropol Regiment; 17th (29th) November, 11th, 12th, 15th, and 16th companies of the same regiment and 3rd Battery 19th Brigade; 25th November (7th) December, 1st Battalion Stavropol Regiment, 3rd and 4th companies 1st Reserve Railway Battalion (from Moscow); 26th November (8th December), 4th Battery 19th Brigade, half of 1st Battery 21st Brigade, 13th and 14th companies Stavropol Regiment, and the 4th Temporary Field Hospital. The 45th Divisional Ammunition Column was still at Petrovsk on the 1st (13th) December.

Heavy storms in the Caspian in November, and the necessity of transporting a part at least of the railway *matériel* from Astrakhán before the closing of navigation, had greatly delayed the transport of the troops to the east coast of the Caspian, and their concentration at Bámi was not effected till two weeks after the time laid down.

According to the plan laid down in the beginning of September, the advance was to take place early in November, the flanking column was to arrive at Báb-Aráb at the same time as the main body reached Yangi-Kala, and then the siege of Gok-Tapa was to begin. The difficulty of supplying the flanking column in the wild uninhabited country, the want of roads, the scarcity of transport for hill warfare, and the passive nature of the enemy's action, as experienced by our troops in their advances on Gok-Tapa in August 1879 and in July 1880, permitted and compelled the rôle of the flanking column to be greatly limited and its numbers to be much reduced. In the beginning of November, Skobelev resolved to advance from Duz-Olum with 6 squadrons and *sotnias* and 2 horse mountain guns up the Chandir valley, and descend into the *oasis* round Kalat. The latter point was chosen for the construction of Fort Opornoye, instead of the previously selected position on the Karagán stream, in consequence of Colonel Grodekoff's reports from Persia to the effect that, until Gok-Tapa was taken, this would be the most favourable point for the delivery of supplies. After the arrival of the cavalry column at Kalat, the advanced column of the main body was also to move thither from Bámi.

* Telegram from General Skobelev to General Annenkoff, No. 7146, dated 1st (13th) November 1880, and letters Nos. 2114 and 2115, dated 7th (19th) November 1880.—*Author*.

† 360 shells were placed in 2-wheeled ammunition-carts and 640 in 80 boxes for pack transport (Colonel Artsishevskii's Report, No. 2851, dated 10th (22nd) October 1880).—*Author*.

Having repeatedly expressed his opinion that all delay or wavering, from whatever cause arising, could only result in the diminution rather than the increase of the forces concentrated in the *oasis*, the Commander of the Expedition demanded that all means should be used for the attainment of the great end without a moment's delay. If by the 1st (13th) December (the desired time, but not that actually attained) there could be concentrated at Kalat a two-months' supply of provisions for 8,000 men, all the artillery available, two complements of artillery ammunition, 300 rounds per rifle, and the whole engineer park, then the Army of Operations might certainly be concentrated at that point also, and the advance against Gok-Tapa might be begun without the aid of the camel transport, and with only the regimental trains and the Akhál-Tekke wheeled-transport (the carrying-power of which was equal to a two-weeks' supply). Kalat had this advantage over a position on the Karagán stream, that it was much nearer Dangil-Tapa, which lightened the work of the wheeled-transport.

Taking the changes in the composition of the flanking column into consideration, it was proposed to detail the troops for the occupation of both the lines of communication and for the concentration at Bámi as follows:—

- (1) For the line from Chikishliar to Társakan, 1st and 2nd Battalions Crimean Regiment, 4th *sotnia* of Taman and 3rd of Poltáva Cossacks;
- (2) For the line from Micháelovsk to Kizil-Arvat, Khwāja-Kala, and Band-Hassan, 1st and 4th Battalions Stavropol Regiment and 5th *sotnia* Poltáva Cossacks—

In all on both lines 16 companies, 3 *sotnias*, 9 guns, and 8 mitrail-leuses.

- (3) For the main body and the garrisons of Bámi and the posts in the *oasis* (not counting the Turkistán troops, of whose composition nothing was known in the beginning of November), the 3rd Crimean, 3rd Stavropol, 3rd and 4th Apsheron, 1st and 4th Daghistán, 1st and 3rd Sámur, 1st and 3rd Shirván Regiment, the Trans-Caspian Local Battalion, the Sapper company, two detachments of volunteers, five military bands, the 1st, 2nd, 4th, and 6th *sotnias* of the Taman, the 5th and 6th of the Lába, and the 1st, 2nd, and 3rd of the 5th Orenburg Cossacks, the 3rd and 4th Batteries of the 19th, the 4th of the 20th, the 6th and half of the 1st Battery of the 21st Artillery Brigade, 6 mortars, three mobile batteries (23 guns), the naval battery and eight 4-pounder bronze guns for the armament of Bámi and the defensive posts—in all 47 companies, 17 squadrons* and *sotnias*, and 81 guns.

Some changes were made in the above in carrying out the plan for the movement and concentration of the troops. On the arrival of the various corps on the east coast of the Caspian, they were at once moved forward by both lines to occupy the stations on them, those detailed for the Army of Operations and at these stations moving to the front to Bámi directly after being relieved.

By the middle of November the troops of the Army of Operations had begun to arrive at Bámi as follows:—14th (26th) November, 1st and 4th companies Shirván Regiment from the Micháelovsk line; 15th (27th) November, 9th and 10th companies Crimean Regiment from Chikishliar; 17th (29th), the 2nd and 3rd companies Shirván Regiment, half of the 6th Battery

* The squadrons and *sotnias* moving on Kalát appear to be counted here without being named, as also the horse mountain guns.—J. M. G.

21st Brigade and one gun of the 4th Battery 20th Brigade from the Micháelovsk line; 19th November (1st December), 11th and 12th companies Crimean Regiment and the half-mortar battery from Chikishliar, 11 waggons with 9-pounder ammunition and all the artillery and regimental transport horses from Duz-Olum; 22nd November (4th December), half of the 6th Battery 21st Brigade from the Micháelovsk line, and the 13th* and 14th companies Daghistán Regiment† from Khwája-Kala; 24th, 3rd, and 4th companies Sámur Regiment and 15th company Apsheron Regiment from Band-Hassan;‡ 25th (7th December), 1st and 6th *sotnia*s Taman Cossacks, half of the 3rd *sotnia* of the same, the 3rd Sámur Regiment, the 1st, 2nd, and 3rd companies Daghistán Regiment, and the 3rd *sotnia* 5th Orenburg Cossacks, with the 3rd Camel Transport Corps, from the Atrak line. Thus by the time of the advance from Bámi of the 1st column of the main body, that is, by the 26th November (8th December), there had been concentrated at that place 26 companies, 3½ *sotnia*s, and 67 guns.

On the departure of the 1st column from Bámi, the concentration of troops there was continued. Thus on the 26th November (8th December) there arrived the 2nd *sotnia* of 5th Orenburg Cossacks with No. 4 Camel Transport Corps; on the 27th, half of the 3rd *sotnia* of Taman Cossacks with the 5th Camel Transport Corps, and the 2nd company of the Trans-Caspian Battalion from Micháelovsk; on the 28th November (10th December), the 12th company Apsheron Regiment and the 1st section of the Akhál-Tekke wheeled-transport from Chikishliar;§ on the 30th November (12th December), the 3rd company of the Trans-Caspian Battalion; on the 7th (19th) December, the 3rd Battalion Shirván Regiment from Társakan; on the 8th (20th), the 11th, 13th, and 14th companies Apsheron Regiment from the Micháelovsk line; and on the 10th (22nd) December, the 13th and 15th companies of the Daghistán Regiment from Kizil-Arvat, and the 16th company of the same from Khwája-Kala.

During November, and almost up to the day of the advance of the first column of the main body from Bámi, the Tekkes made no attempts against our lines of communication, and did not even alarm the troops in the camp at Bámi. Only on the 12th (24th) November some of our Yamút *jigits*, who had advanced from Bámi to near Burma to cut thorn scrub, were fired at on arriving at a small tower 1½ miles north of Burma. They, however, surrounded the tower and forced five armed Tekkes in it to surrender. The latter declared that they had been left there by the band of Sufi-Khán, who, two days before, had advanced against the Micháelovsk line, and that a large band under Taghma-Sirdár was shortly to advance thither from Dangil-Tapa. The Yamúts and Gokláns on the Atrak line also carried out partial attacks on our communications, and tried to capture single persons, to drive off cattle, &c. Thus

* On the same day the 13th company Daghistán Regiment was sent to Kizil-Arvat as a temporary measure, as the 16th company Apsheron Regiment was expected to advance thence to meet Kuropátkin's Turkistán column at Igdi ty the wells of Dinár. With the 16th company was also to march the 1st *sotnia* 5th Orenburg Cossacks, and to carry supplies and water 170 camels were placed at the disposal of the Commandant at Kizil-Arvat from the reserve Government convoys.—*Author*.

† The 16th company Daghistán Regiment remained temporarily as garrison at Khwája-Kala.—*Author*.

‡ Band-Hassan was occupied by the 4th company Daghistán Regiment sent up from Yágli-Olum.—*Author*.

§ This brought up projectiles for long-range guns, tea, sugar, and ghee to Bámi. The 2nd section, which was only completely formed on the 20th November (2nd December), left Chikishliar for Bámi with projectiles for long-range guns and ships' provisions. The organization of the wheeled transport will be noticed further on.—*Author*.

the inhabitants of the *aul* of Igdir (beyond the Atrak) several times drove off the cattle which had been brought by our contractor within Persian territory. On the 7th (19th) November, a small party of Gokláns attacked some of our camels $3\frac{1}{2}$ miles from Yágli-Olum on their return march and drove off 13 head; but 15 of the Poltáva Cossacks from Yágli-Olum pursued them, and after a skirmish not only retook the camels, but also captured four belonging to the raider.* On the 12th (24th) November, a detachment of 15 men of the Crimean Regiment and 5 of the Poltáva Cossacks under non-commissioned officer Kudlayenko, while on the march from Karája-Bátir to Yágli-Olum, noticed a party of horsemen who were driving off sheep. The Cossack sent after them was fired at, and Kudlayenko at once doubled his detachment towards the enemy and opened fire, upon which the latter retired, leaving 50 sheep in his hands. "In this unimportant skirmish," ran a General Order issued by the Commander of the Expedition, "daring and military devotion were shown by all concerned, and I am therefore bound to express my thanks to all who took part in it, and especially to non-commissioned officer Kudlayenko for the prompt support given by him to the Cossacks. Of the captured sheep, five are to be given as a reward to those engaged in the skirmish, and 10 *roubles* are to be given to non-commissioned officer Kudlayenko. The remaining sheep are to be handed over to the garrison of Karája-Bátir and shown on the books of the supply-depôt there."† On the 18th (30th) November several telegraph poles were thrown down between Karája-Bátir and Yágli-Olum, and the wire was cut. In these actions General Skobelev saw the fruits of the intrigues of foreign agents, and sent information to our Ambassador, who thought it his duty to call the attention of the Persian Government to this, and to point out the necessity of effectual measures being taken to prevent a repetition of such hostile acts.

The results of the enquiries made by order of Sháh Nasr-ud-din by the Governor of Astrábád did not confirm General Skobelev's suspicions. It appeared that the band which had destroyed our telegraph consisted of Tekkes under Turumche-Sirdár, and that the Yamúts had taken no part in this raid. The Russian Ambassador Zinovieff was far from disputing the existence of intrigues of English agents, of which General Skobelev had complained; but still he thought it his duty to remind the latter that the Teherán Cabinet had not only refused to listen to such instigations, but had done their best to prevent their having a baneful influence on our operations. To these exertions of the Persian Government must be ascribed the sudden change in the attitude of the Yamúts towards us. After beginning by an unconditional refusal to assist us in any way, they finished by furnishing us with their best camels, which we required to supply our posts on the Atrak. We were equally indebted to the exertions of the Teherán Cabinet for the success of the mission confided to Colonel Grodekoff, and this success permitted of our troops assuming the offensive at an earlier period, and saved us from heavy losses.

"These facts," wrote Zinovieff to the Minister of Foreign Affairs, "sufficiently show that the intrigues of English agents have in no way affected the co-operation of Persia with us at the time when such was required. If, on the other hand, the Persian Government has not thought fit to put an end to the secret relations which probably exist between the English agents and the Turkumáns, it appears to me that we have all the less right to reproach the

* Telegram from Petrúsevitch, No. 7392, dated 8th (20th) November 1880.—*Author*.

† General Order, Trans-Caspian Field Force, No. 489, dated 16th (28th) November 1880.—*Author*.

Government with this, as foreign agents have a privileged position in this country, and the local authorities have to be very careful in their dealings with them.”*

In the latter part of November, a large band of Tekke horsemen left Gok-Tapa to attack the Micháelovsk line. On the 23rd November (5th December), several parties of from 30 to 50 horsemen appeared before Kizil-Arvat, being apparently on the march from Ushák to the Uzboi. Patrols sent out from the fort forced them to withdraw out of sight, leaving behind them two unarmed Turkumáns, who said that they had been taken prisoner on the Atrak, and that the parties which had just appeared were driving off large flocks captured by them on that river. The Cossack patrols had, however, remarked no traces except those of horses, and the quick retreat of the Tekkes before them caused them to doubt the truth of the prisoners' story. On the 24th November (6th December), large bodies of Tekkes again showed themselves marching from the sands towards Ushák.†

On the 23rd November (5th December), one of Gromoff's convoys of 2,000 camels left Kizil-Arvat on its return march to Mulla-Kári, and with it as escort from Kazánjik there marched half of the 11th company Apsheron Regiment (80 men) under Sub-Lieutenant Vasiliyeff. The camel-drivers were half Kirghiz and half Khivan Yamúts, the same who in August, near the Kára-Bug-ház, had declared that they would not serve the Russians against the Tekkes, and who had been forced to march on to Krásnovodsk. On the 24th November (6th December), after halting for the night at the well of Ushák, the convoy continued its march to Uzun-Su, and at 9 A.M. there were observed single horsemen in the sands who moved about quickly and concealed themselves. On this day the following troops were on the line:—At Kizil-Arvat, besides the garrison of two companies, two *sotnias* of the 5th Orenburg Cossacks and half of the 3rd *sotnia* of Taman Cossacks, which had been detailed to escort the Government camels from the Kizil-Arvat defile to Bámi; on the march from Kazánjik to Uzun-Su, a company of the Trans-Caspian Battalion (of the Alexandrovsk Local Detachment); at 6½ miles from Kazánjik on the road to Uzun-Su, the telegraph park with half of the 10th company Apsheron Regiment; and at Kazánjik halted for a day, three companies of the 3rd Battalion Stavropol Regiment, the 4th Battery 19th Brigade, and half of the 5th *sotnia* of Lába Cossacks, besides the garrison of 1½ companies of the 3rd Battalion Apsheron Regiment.

Half-way between Ushák and Uzun-Su the ground is much cut up by deep ravines, which are very favourable for ambuscades, and at this point the convoy was more than 1,200 yards long. The escort was equally divided between the advanced guard, rear-guard, and flanking parties. About 10 A.M. a large body of the enemy appeared and surrounded the convoy. Sub-Lieutenant Vasiliyeff proposed to halt the convoy and form up the camels; but Major Kharitonoff, who was marching with the column, took command as the senior officer and ordered the march to be continued. The Khivan-Turkumán camel-drivers began to untie the camels, which caused the column to become still longer and more scattered; and the rear-guard, to which Sub-Lieutenant Vasiliyeff had added the detachments formerly covering the flanks, was not able to keep order, as part of the drivers had thrown themselves on their camels and made for the hills, others hiding amongst the camels. Noticing the disorder in the rear-guard, the

* Zimovieff's despatch, No. 107, dated 8th (20th) December 1880.—*Author*.

† Report from Captain-Lieutenant Zuboff to Petrúsevitch, No. 211, dated 24th November (6th December) 1880.—*Author*.

enemy increased his fire, and then attacked sword in hand, upon which a hand-to-hand fight took place, in which almost all our killed and wounded fell by cold steel. Gromoff's clerk and some Kirghiz fought by the side of the soldiers,* but the Yamút camel-drivers helped the Tekkes to drive the camels into the sands. Having driven off all the camels in the direction of the wells of Dinár, some of the Tekkes remained with them, but the greater part moved to the wells of Ushák to protect their booty from the troops at Kizil-Arvat. A party of men of the Apsheron Regiment continued to fire at the retreating enemy. Our wounded, who during the action had been put upon camels, had fallen along with the latter into the hands of the enemy and were massacred. The camels had been driven off shortly after 1 o'clock, but at 10 A.M. Sub-Lieutenant Vasilieff, on seeing the large bodies of the enemy, had sent a Kirghiz *jigit* to Kazánjik with a report to that effect. This man had been killed on the way, but another *jigit*, also a Kirghiz, named Utiján-Jánoff, sent out with a report, succeeded in breaking through the Tekke lines, and at 1-30 P.M. reached Kazánjik. Colonel Kozelkoff at once sent out the half Lába *sotnia* (60 men) under Lieutenant Aleinikoff to pursue the Tekkes, and followed himself with 3 companies of the Stavropol Regiment. On reaching the scene of the engagement, Aleinikoff found the half company of the Apsheron Regiment engaged in burying its dead, and far on the horizon he saw the Tekkes with the camels. The half *sotnia* at once galloped off in chase of the latter, and at 5 P.M., at 13½ miles from the scene of action, they came up with the Tekkes, having left one-third of their men behind on the road. After the Cossacks marched the half of the 11th company Apsheron Regiment, and the company of Trans-Caspian Battalion. The Tekkes, on the approach of the Cossacks, advanced to the charge, but Aleinikoff dismounted his men, and volleys at close range forced the Tekkes to turn and seek cover behind the camels. Aleinikoff then mounted and charged straight down on the convoy, upon which the camels opened out and left the Tekkes uncovered. Dismounting again, Aleinikoff's volleys forced the Tekkes to take to flight, and the Cossacks followed them up for 3 miles causing them loss, and only halting when darkness came on. Aleinikoff then ceased his pursuit, collected all the camels, and drove them to the Uzun-Su stream. Not one camel was driven off by the Tekkes, although more than 200 had been killed or wounded or had been left behind as jaded. On the road to Uzun-Su, Aleinikoff sent the 1½ companies which had followed him, and shortly afterwards Colonel Kozelkoff with his three companies and the united forces bivouacked at Uzun-Su. Next day the convoy continued its march to Mulla-Kári. In the action of the 24th November (6th December), we lost 26 men of the 11th company Apsheron Regiment, 5 camel-drivers, and 2 Kirghiz *jigits* killed, 8 men of the Apsheron Regiment, Gromoff's clerk, and two Kirghiz camel-drivers wounded. The half *sotnia* of the Lába Cossacks had no losses among the men, but 9 horses died of exhaustion. The Tekkes left some dead bodies on the scene of the fight with the men of the Apsheron Regiment, but they carried the greater part of their dead away with them and buried them in the steppe. At the fight on the recapture of the camels they left behind 40 dead bodies, 30 horses, 7 rifles, 2 sabres, and bags with forage and provisions laden upon the camels. According to a prisoner, Taghma-Sirdár's total losses were 100 men.†

* The Turkumáns do not take Kirghiz prisoners, as they think them useless and so kill them. The latter know this, and this is one of the reasons why they fought so well by the side of our men.—*Author*.

† Diary of the Staff of the Trans-Caspian Field Force, No. 3 of 1880, page 153; Report from Annenkoff, No. 5040, dated 10th (22nd) December.—*Author*.

The success of the Lába Cossacks was due, firstly, to their sudden attack ; and secondly, to the fact that the Tekkes had no cartridges, as all had been fired away in the first affair with the infantry.* Lieutenant Aleinikoff was rewarded with the 4th Class of the Order of St. George. For three days longer the Tekke bands remained in the vicinity of Uzun-Su, but retreated, as it appears, on receiving news of our advance against Gok-Tapa. The concentration of troops at Bámi was only delayed three days by these events.

The surveys made in May and June between Kizil-Arvat and Micháelovsk set all doubts at rest as to the possibility of constructing a railway in that region, and that at small cost compared with that of Russian railways. Before proceeding, however, to carry out the plans made upon these surveys, it was necessary to decide the question as to whether the railway was a necessity, or whether it could be dispensed with. When the subject of the expedition was first mooted, the possibility had presented itself that on our occupying Gok-Tapa and Askhábad, the population of the *oasis* might decline to fight and abandon their fortifications or leave the *oasis*, and this could hardly be prevented by us. In this case it was possible that we might be compelled to advance much further than we desired, thus prolonging the Expedition and forcing us to increase our transport, or provide new means of bringing up supplies. At this time all the efforts of the leaders of the Expedition were directed to preparing for the conquest of Gok-Tapa and Askhábad, but afterwards the second phase of our operations, the final subjugation of the population of Akhál-Tekke and the organization of our rule in that country, would have to be undertaken.

If now all depended upon the accumulation at Bámi of masses of supplies and artillery stores, after the capture of Askhábad the amount of those required would not only not be diminished, but would actually be increased, as the troops would have to be held in constant readiness to strike at an enemy from whichever side he advanced. To enable us to take up such a commanding position in that distant land, the *oasis* would have to be closely connected with the sea, or a huge wheeled-transport service would have to be organized. It was therefore necessary to consider what means of transport it was advisable to make available on the east coast of the Caspian so as to avoid running any risks.

To ensure the success of the Expedition as far as concerned transport, all localities where there were camels were ransacked, and we purchased them in Mangishlák, on the Atrak and on the Emba, and hired them in Khiva in the Ust-Yurt and on the Atrak. With great exertions 12,000 were gathered together, but it was foreseen that at the end of the Expedition but few of those animals would be left, as has always been the case in our wars in Central Asia, and in those of the English in India and Afghánistán. Not only on the Atrak, but in Mangishlák on the Emba, and even in Khiva, almost all the camels had been taken which could be spared by the population, and next year we would not be able to obtain any animals from those countries. Thus the power of the country to supply us with transport animals was far short of our requirements, and therefore the troops who had to operate in the *oasis* in 1881 would be almost without carriage, unless wheeled-transport, which is expensive to initiate and difficult to keep up in that climate, were organized.

The camels already employed or on the road to Krásnovodsk were amply sufficient to concentrate at Bámi supplies to last to the 1st (13th) July 1881 for all the troops in the *oasis*, and it might be considered that, as regards the operations against the Tekkes, the transport available would be sufficient for the conquest of Gok-Tapa or even of Askhábad.

* Letter from Petrúsevitch to Skobelev, dated 7th (19th) October 1880, from Bámi.—*Author*.

This, however, was only the first stage of the operations, and after conquering the *oasis* we had to make ourselves masters of it, and put ourselves in a position to meet all political combinations which might arise from the development of the Eastern Question, the connection of which with our obtaining a firm footing in the Akhál-Tekke *oasis* was very close, and which formed one of the most important reasons for our undertaking the Expedition. This was only possible if we were rendered independent of aid from Persia or from the Atrak Turkumáns, and of such means of transport as camels, the collection of which in 1880 had proved that the possibility of repeating the operation in the immediate or even the distant future was very doubtful.

The Commander of the Amu-Daria district, Colonel Grotenhelm, gave it as his opinion that 5,000 camels could only be got from Khiva by force of arms. The prefect of Mangishlák, Colonel Navrotski, reported that every available camel had been taken away from the people, and that there was no hope of raising even a small number within the next few years without ruining the Kirghiz. The collection of animals on the Emba had also shewn that great difficulties had been met with at Orenburg; and, finally, on the Atrak, notwithstanding the high prices paid for the transport of stores from Chikishliar to the advanced points, camels were only obtained with great difficulty. It was only possible to take camels from the above-mentioned districts, but even they were so exhausted in this respect that, without using them up altogether, no more camels could be obtained. The camel is the main factor of the riches of the nomad population; without it they cannot grow rich, and in the east poverty is the cause of insurrections and troubles. If we continued our military requisitions for camels, the people would be ruined and there would be revolts, for Asia is only quiet when she is held in terror and when she is growing rich.

Our hopes of assistance from Persia were very slight. The northern districts (Bujnurd, Kuchán, and Daragaz) were certainly able to supply us with corn, but that only so long as our requirements were not so great as to make other interested powers endeavour to place them on the footing of international agreements. Under other conditions various foreign questions might become so pressing as to paralyse the liberty of action of the cabinet of Teherán, deprive it of the possibility of disposing of its own resources, and force it to assume an attitude of strict neutrality. In such a case it was to be expected that no supplies could be drawn from Persia, and that the troops occupying the *oasis* would be in a very disagreeable position, without supplies or means of bringing them up from the coast from Krásnovodsk or Chikishliar. This position might even become so critical as to force us to evacuate the *oasis* conquered at such expense, with so much trouble, and with such losses.

Events in Afghánistán, namely, the defeat of General Burrows near Girishk, might bring the English up to the walls of Herát; and once there, not only Central Asia, but the whole world, would become excited, as was the case during our negotiations with China respecting Kuldja in 1879-81. Under these circumstances, a permanent, or even a temporary, occupation of Herát by the English without a corresponding advantage gained on our side would awaken all the slumbering hopes in the various tribes and Khánates which had been deprived of their independence by us, and such a movement beginning in the regions near Herát might spread to the sources of the Sir-Daria and Oxus (Amu-Daria). If we had a railway at our disposal, we should in such a case be able to throw a corps of sufficient strength against Herát, and thus cut the communications between the insurgent populations and our opponents.

We had to face the possibility of having to meet such a state of affairs in Central Asia, and therefore we had to consolidate our position in the Akhál-

Tekke *oasis* without relying upon Persia, who at the moment of need might be unable to assist us. Thus our position in the *oasis* could only be considered assured when we could do without aid from Persia or from the Turkumáns, when we had nothing to fear for the quietness of our Central Asiatic steppes, and when we were able to appear without delay and with considerable forces on the lower part of the Hari-Rud, and be able at the same time to supply them with all they required. This could only be done when we had a secure line of communication between the sea and the Akhál *oasis*, which would enable us to bring troops and stores up quickly. Such a line of communication could only be afforded by a railway.*

The fact of our being able by the aid of the railway to deploy our forces quickly in future along the northern frontier of Persia would enable us, occupying as we should strong strategical positions in the Caucasus and in Akhál, not only to oppose any hostile attacks which might be directed against us from Tabriz and Mashad, but also to threaten the enemy's communications.

Thus for the capture of Gok-Tapa, and perhaps of Askhabád, the railway was not necessary, but it was required to guarantee the success of the Expedition, if the Turkumáns did not fight and the war was prolonged, to enable it to dispense with aid from Persia or the Turkumáns, and to make it possible for us to develop large forces quickly on the Hari-Rud. In a word, in a political sense the Akhál-Tekke *oasis* was destined to exert some influence on our relations with foreign powers both in Europe and in Asia; and, as in 1881, we should have no more transport left in the country, the construction of a railway became an urgent necessity.

Recognizing on his side the necessity of securing our position, General Skobelev had pleaded for the extension of the railway from Mulla-Kári to Kizil-Arvat, and had requested that the two remaining companies of the 1st Reserve Railway Battalion might be formed at once so as to be sent down the Volga before the closing of navigation.†

For all Skobelev's proposals with regard to the Trans-Caspian Railway, the War Minister requested Imperial sanction without the least delay. On the 7th (19th) September General Skobelev received permission to continue the construction of the line, and on the 10th (22nd) November the 3rd and 4th railway companies (5 officers and 510 men) left Moscow for Trans-Caspia. In communicating the Imperial decisions to General Skobelev, Count Milutin reminded him of the necessity of limiting the length of the line and cutting down the expenditure to as low a figure as possible, and a permanent line was only to be laid down to the point where the light field railway or ordinary transport

* Colonel Grodekoff, when in Persia, reported that, as far as he could see, the country near the Akhál-Tekke *oasis* was not able to furnish the 38,400 cwt. of flour and 88,000 cwt. of barley, which would probably be required by the troops (6,000 men and 2,000 horses) who would be left in Akhál after its subjugation. Partial famines had made the people very chary of exporting corn, and the Persian Government had already forbidden its export from Mazanderán and Astrábad. Such a prohibition might also be extended to the northern provinces if there were any failure of the crops in Khorássan. To hope to provision the troops from Khiva was absurd as long as Marv remained independent. Our position on the occupation of the Akhál *oasis* would be similar to that when we were forming the new Khokand line. We had nothing, and everything was in front, and therefore we had to push forward. A boundary on the Atrak, however, would not satisfy us; we should receive uncultivated lands, *plus* the poorest parts of the *vildyets* of Bujnurd and Kuchán. Our new acquisitions would not afford us corn, and we should again be dependent on Persia. Therefore to be really independent we should require to annex both *vildyets* entirely. As this, however, was impossible, we should have to depend upon the sea. At the end of the Akhál-Tekke Expedition our transport resources would fail us. Our only safe course was to prolong the railway from Mulla-Kári to Kizil-Arvat.

† Telegram from General Skobelev to the Chief of the Staff, No. 1350, dated 4th (16th) October 1880.—*Author*.

could be used without disadvantage.* The General Staff made arrangements for the delivery of the *matériel* at Astrakhán, where it began to arrive on the 1st (13th) October. That for the line to Mulla-Kári had been landed at Micháelovsk in August. The Commander-in-Chief of the Army of the Caucasus on his part, while awaiting the permission for the execution of the whole project, had, when the works were completed as far as Mulla-Kári, given permission for them to be pushed on gradually to Bála-Ishem, and had done his best to hasten the sanction for the whole plan. In order to facilitate the study on the spot of all that related to the project, the Engineer Statkovski was ordered to Trans-Caspia,† where he arrived (at Micháelovsk) on the 4th (16th) October.

After an inspection of the works already executed, and the most difficult parts of the proposed Trans-Caspian Railway, he came to the conclusion that the greatest difficulties had already been overcome, and that, if there were no delays in the delivery of the *matériel*, the remainder of the work could be easily and quickly executed. On the 4th (16th) October the line was completed to Mulla-Kári, a distance of 15 miles, and on that day the first supply train of the waggons loaded with provisions was sent up to that place.

One of the chief difficulties in the construction of the line and in keeping it in order was the excessively hilly and cut-up nature of the ground for the first 20 miles from the Gulf of Micháelovsk, and the shifting nature of the sand which was blown by the wind on to the line in cuttings, and driven out from under the sleepers on embankments. But when, after great exertions, all the sand-hills had been cut through and embankments built and the line laid, it was found that the accumulation of sand on the rails could be easily cleared off during repairs or prevented by wattled screens, while the blowing away of the sand from under the sleepers could be stopped by covering the sides and top of the embankments with a layer of thick clay or by pouring a solution of lime over them to form a crest; and when the line had been pushed further forward stones might be used for the same purpose. The sand-hills, or so-called *bar-khúus*, do not consist of masses of loose sand alone, but contain also a good proportion of clay which binds all together. They are covered with *saksaul*. As regards the salt patches, it was feared that on account of their lack of solubility they would, during the bad season of the year, let the sleepers sink. Statkovski's opinion was that, if the embankments were given only a small profile, and if it were covered with a sufficiently thick layer of ballast, its stability might be relied upon.

The principal thing was the delivery of the rails and sleepers before the closing of navigation, and there was no doubt that the "Caucasus and Mercury Company" were not in a position to do so. The only way was to borrow from the Trans-Caucasus Railway all the rails and sleepers which could be spared from its stores at Baku, and repay them after navigation was re-opened.

The calculated cost of laying the section of the line from Mulla-Kári to Kizil-Arvat, exclusive of that of rails and rolling stock, was 2,898,899 *roubles* 33 *kopecks*; but afterwards, in consequence of the current prices for sleepers and earthwork, it was found possible to reduce this sum to 2,699,997 *roubles* 45 *kopecks*, also exclusive of rails and rolling stock. A further reduction, in Statkovski's opinion, was dangerous, because, if the sums allowed were found eventually to be insufficient, the preparation of fresh estimates and the correspondence caused thereby might cause a delay in the execution of the works, while

* Letter from Count Milutin, dated Livadia, 9th (21st) October 1880.—*Author*.

† Letter from Pávloff to General Skobeleff, No. 4001, dated 4th (16th) October 1880.—*Author*.

any sums remaining over might form the reserve capital which was necessary for such a line. Earthwork might appear too highly estimated for; but, taking into consideration the urgent nature of the work, the dearth of provisions for the workmen, the difficulty of inducing the proper workmen to come to Trans-Caspia, which enjoyed no good reputation, the shortness of the day's work, and the fact that the men would soon have to dig in frozen ground in the morning, Statkovski thought it impossible to reduce the estimates for such works. In many other respects also the estimates could only be considered approximate, as the prices depended upon whether the articles were brought from Astrakhán or whether they were obtained in the Caucasus, and also because of the insufficiency of the local surveys.

In the preparatory surveys, the *minimum* radius of curves had been assumed at 700 yards, and the *maximum* slope at 18 in 1,000, and to hasten the work the section from Micháelovsk to Mulla-Kári had been constructed under these technical conditions. Statkovski drew attention to the steepness of the *maximum* slopes, which, compared with the limiting slopes of 1 in 100 usually allowed for such localities, only permitted of 52 per cent. of the usual load being taken in a train, *i.e.*, 5,200 *puds* (1,664 cwt.) instead of 10,000 *puds* (3,200 cwt.), and thought it necessary to correct the profiles, which would make a difference of 686,000 cubic feet in the earthwork. The conversion of the steep slopes of the section already constructed might be made gradually, but was not to be taken in hand at first, when the great object of the constructing engineer was to push the line forward as rapidly as possible.

There were two goods and passenger locomotives available, but only one was in working order. Goods engines would have been more useful, but none had yet arrived, although they were expected shortly. There were 57 trucks and 6 covered-goods waggons.

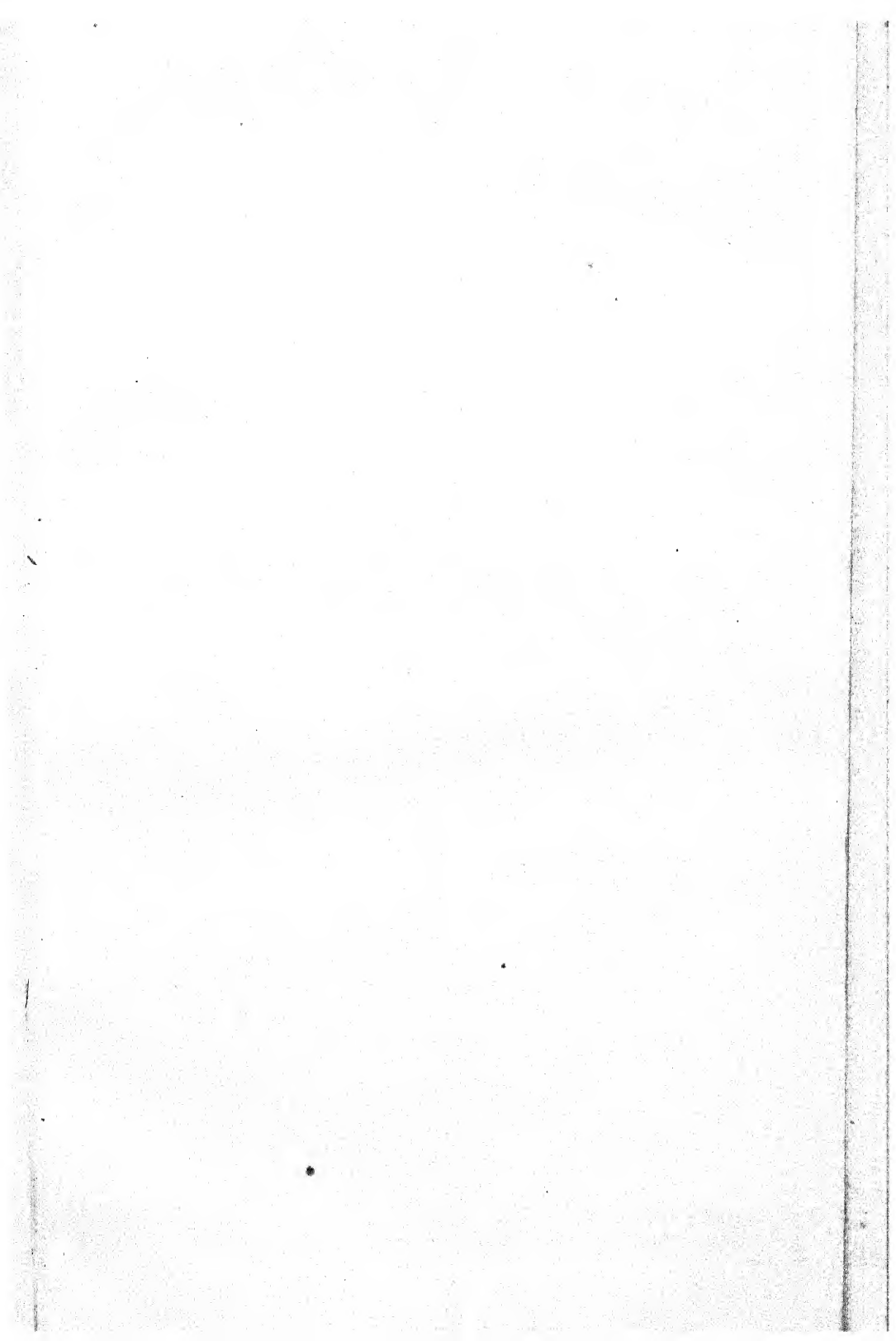
The 100 *versts* (66 $\frac{2}{3}$ miles) of Décauville railway had been of great use in transporting stores and material from the quays to the store-sheds, workshops, and depôts, and from them to the railway waggons. In Statkovski's opinion this line, though difficult to lay in sandy or hilly ground, would be of great service in the more advanced portions of the line where the ground was level and the soil salt. It was worked by 450 Kirghiz horses, bought in Mangishlák in charge of hired drivers;* but in the beginning of October two engines arrived for this line. Statkovski thought that as we had already 66 $\frac{2}{3}$ miles of Décauville's railway, it would enable us to dispense with more expensive means of transport if we obtained some more locomotives on this system, so as to do without horses and utilize the line to the utmost.

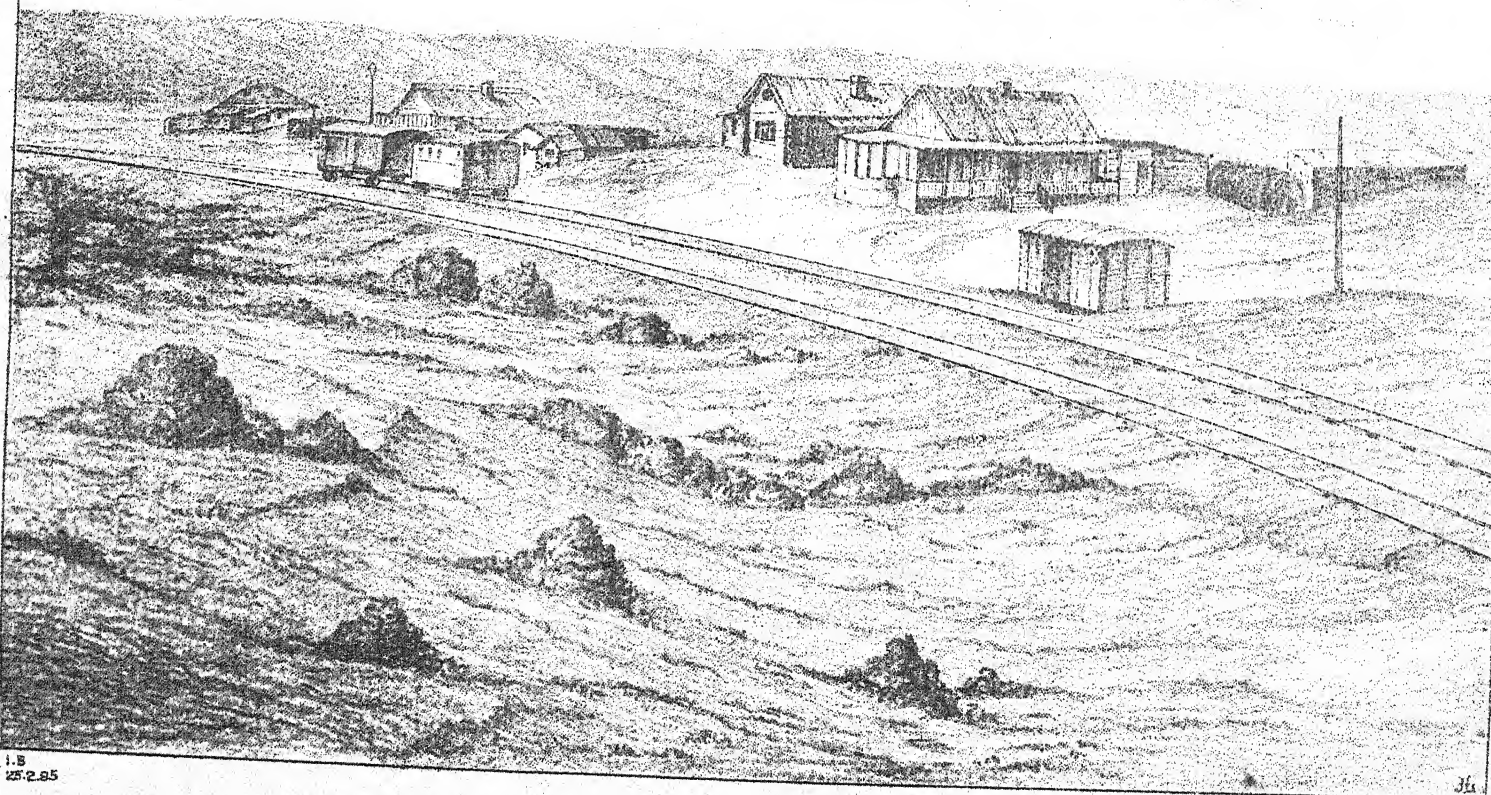
Nobel's condenser, erected at Micháelovsk, gave only 10,800 gallons *per diem*, and near it were constructed two iron cisterns—one for 270,000 and the other for 67,500 gallons. The other condenser, a floating one, had such old boilers that they were patched up with much difficulty, and were so burnt out that in places it was impossible to repair them. The steam pressure in the boilers could not be raised above 2 feet, but, all the same, the condenser gave from 5,400 to 8,100 gallons in the 24 hours.

The question of water-supply along the line was a difficult one to settle, because it was advisable to dispense, as far as possible, with condensed water, which was expensive and difficult to transport. The quantity and quality of the

* General Order, Trans-Caspian Field Force, No. 273, dated 11th (23rd) September 1880.

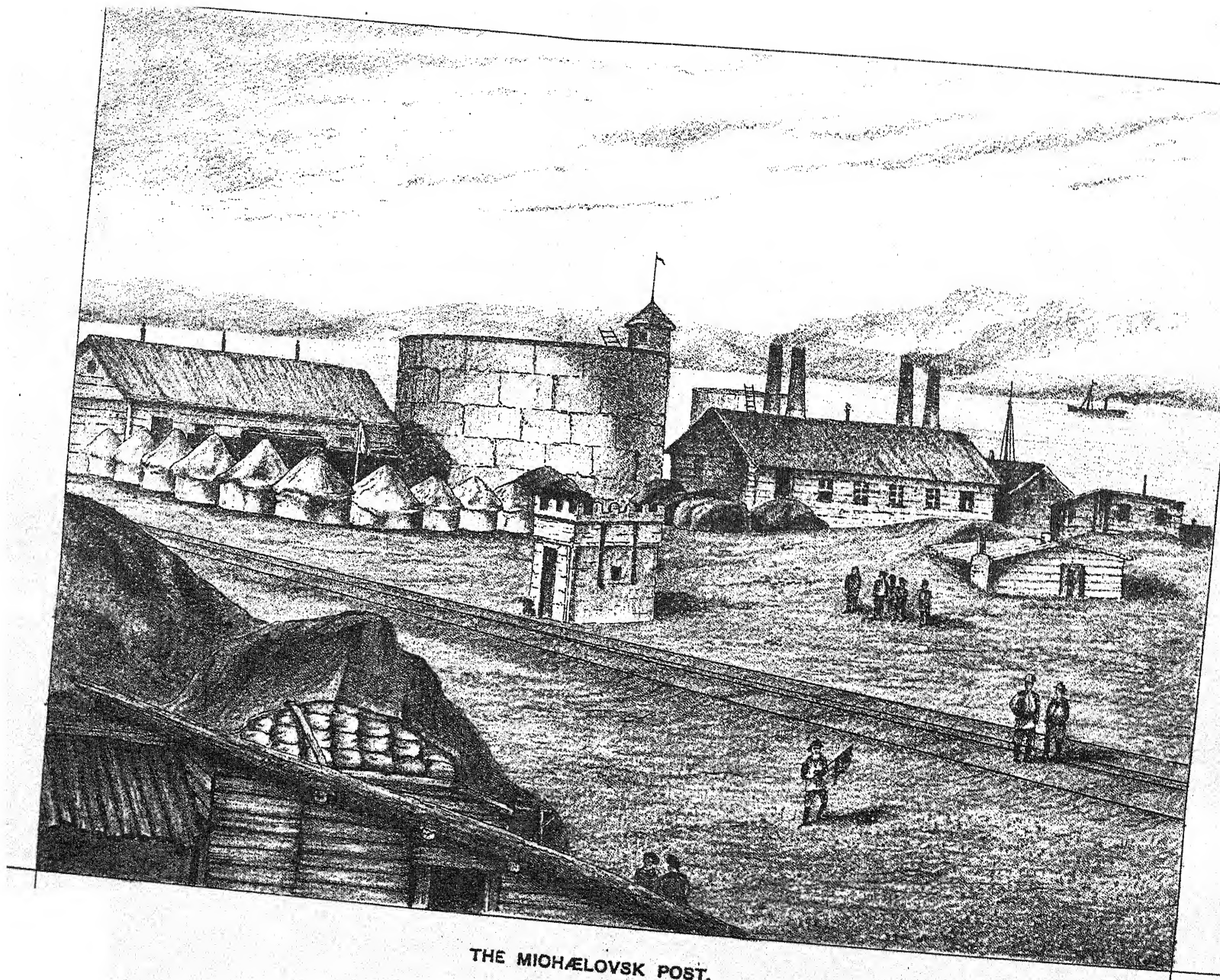
—*Author.*





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STATION OF MULLA-KÁRI ON THE TRANS-CASPIAN MILITARY RAILWAY.



THE MICHÆLOVSK POST.

Of the sleepers ordered, 54,000 were brought from Astrakhán and 20,000 from the stores of the Trans-Caucasus Railway at Baku. On the receipt of these on the east coast of the Caspian work was resumed, and by the 1st (13th) December the line had been pushed up to Kutol, while the Décauville railway ran to a point 16½ miles from Bála-Ishem on the road to Aidin.

On the 6th (18th) November telegraphic communication was opened between Band-Hassan and Bámi, but the line from Khwája-Kala* to Band-Hassan was only ready at the end of the month. As a temporary measure a heliograph station was established at Band-Hassan from the 8th (20th) to the 20th November (2nd December) to send messages to Khwája-Kala, but fogs and cloudy weather seldom permitted of the instrument working. During this time it only worked on eight days, and never for more than two hours on each. As the army was about to advance, all the heliograph stations were taken up on the 23th November (7th December), and the heliographic detachment concentrated at Bámi.

On the 14th (26th) November, a station of the field telegraph had been opened in Kazánjik, and after that the line was extended towards Kizil-Arvat, the Imperial permanent telegraph officials having taken over the line between Mulla-Kári and Bála-Ishem.

In November there was formed the "Akhál-Tekke Government horse-transport." The question of buying waggons for the transport of such heavy stores as could not be carried on pack animals had been ruined in the beginning of August 1880. It was then proposed to buy 100 waggons, horse them with Kirghiz horses bought in Mangishlák, placing them at different points on the Micháelovsk line. At first, however, it was resolved to buy only 50 Molokani waggons, and with this object, Captain Grozdetski of the Krásnovodsk Local Battalion was sent to Baku on the 7th (19th) August with 9,000 *roubles*, allowing 170 for each waggon. When the plan of the advance against Gok-Tapa was worked out, the idea of having wheeled transport on the Micháelovsk line was not entertained, as another destination had been given to it, and at the same time Grozdetski was ordered to purchase 100 waggons.† By the beginning of September he had fulfilled his instructions, and had obtained in all 129 waggons with spare wheels. A special board with Colonel Kishinski, the Commander of the Baku Local Battalion, as president and an officer sent from Trans-Caspia as member,‡ was formed at Baku to take over the waggons, and it was furnished with instructions.§ Afterwards, however, to hasten affairs and clear up all doubtful points, as considerable latitude was allowed by the instructions, Colonel Volkoff of the General Staff was sent to Baku. He was ordered to despatch the waggons to Baku on the sloop-of-war *Persiánin*, and was permitted to take them to pieces so as to send more at a time.||

To horse the waggons at least 529 horses were required, including spare animals. Two hundred and twelve were taken from those bought in Mangishlák, and 21 from the train horses kept up at Fort Alexandrovsk, leaving about 300 to be provided. General Skobleff requested General Pávloff to assist him in obtaining these horses, and the latter at once gave orders to have them bought

* Telegraphic communication between Chikishliar and Khwája-Kala was opened on the 28th September (10th October).—*Author*.

† The attempt made to hire waggons in the Government of Baku was given up on account of the losses in cattle and the large wages asked by the drivers.—*Author*.

‡ General Order, Trans-Caspian Field Force, No. 266, dated 10th (22nd) September 1880.—*Author*.

§ See Appendix No. LXX.—*Author*.

|| Instructions to Volkoff, No. 5963, dated 27th September (9th October) 1880.—*Author*.

in the Caucasus. All the horses were collected at Petrovsk by the 13th (25th) October, the last arriving at Chikishliar on the 30th* October (11th November). Besides these, 67 horses were bought from those *sotnias* of the Ural Cossacks which had escorted the camels to Krásnovodsk, and had then been sent home by sea. The harness required was prepared in two places, by Grozdetski at Baku for 218 horses, and by Staff-Captain Poganko of the Artillery at Vladikavkaz for 320. Spare stores were got ready at Baku by Grozdetski and Volkoff,† and at Astrakhán by General Makároff,‡ Aide-de-Camp. At Baku were bought bags, halters, currycombs, brushes, smiths' tools, and medicines, and the different articles required were issued from the Baku section of the Tiflis Circle Artillery Dépôt.§ Finally, tools for the construction of workshops were bought and artificers hired, as none were available from the troops.

By orders issued on the 16th (28th) October by the Commander of the Expedition, the Akhál-Tekke Government Horse Transport was formed into two divisions of 60 waggons each, one division of 150 pack horses, and one of 50 *arabas* furnished by Sansieff. Lieutenant-Colonel Shkurkin was named Commandant of the Transport with the powers of a commander of a battalion, and officers were appointed to command divisions with the powers of company commanders. The Commandant of the Transport was placed under the Chief of the Staff of the Expedition, who had the powers of a Commander of a Division over the transport corps.||

The corps was formed at Chikishliar. There were 124 waggons instead of 120 as laid down, with 4 horses each, in all 488, and 42 spare horses—total 530. The *personnel*, including drivers, non-commissioned officers, and hospital assistants, all told off from the Crimean Regiment, comprised 222. The horses purchased by the General Staff of the Army of the Caucasus were much better than the Kirghiz animals, and therefore Shkurkin so arranged the teams that the wheel horses were Caucasian and the leaders Kirghiz. The first division was formed on 31st October (12th November), and the second on the 20th November (2nd December). It appeared that many of the horses had never been in draught before, and therefore they had to be given about a week's preliminary training. The shoeing caused much delay, as almost every horse had to be thrown for the operation. Each division had camp kettles, cooking-pots, orderly-room, &c.¶

After their formation was completed the divisions were moved up to Bámi, the first on the 10th (22nd), and the second on the 22nd November (4th December). The division, composed of 50 one-horse *arabas*, was furnished by the Ossetian Sansieff of the Vladikavkaz District. In the agreement concluded with him, it was stipulated that for every three waggons there should be a driver provided with a fire-arm. The *arabas* and horses were to be transported from Petrovsk to Chikishliar at Government expense; they were to be hired for six months and Sansieff was to be paid 50 *roubles* per *araba* in the first month, and 45 in each of the remaining five. For each horse was to be drawn from

* Telegram from General Lazareff, No. 2728, dated 1st (13th) November.—*Author*.

† Volkoff was ordered to buy 60 spare hind-wheels and 40 fore-wheels.—*Author*.

‡ The latter was ordered to provide 200 oak felloes, 200 naves, 500 spokes, 100 spare pieces for poles, 100 for poles and 100 for splinter bars, 700 sets of shoes with nails, greasing materials for 130 waggons for six months, tires, and other iron-work, &c. (Telegrams Nos. 5434 and 6023, dated 20th and 29th September (2nd and 11th October) 1880).—*Author*.

§ Saddles for the non-commissioned officers in charge, bridles, grease boxes, &c., &c.—*Author*.

|| General Orders, Trans-Caspian Field Force, Nos. 390 and 391, dated 16th (28th) and 17th (29th) October 1880.—*Author*.

¶ Report from Shkurkin to the Chief of the Staff, Trans-Caspian Field Force, No. 131, dated 31st October (12th November) 1880.—*Author*.

Government stores a daily ration of 6·9lbs. of oats and 18lbs. of hay; the men were to receive soldiers' rations, and in case of losses among the horses on service Sansieff was to receive 35 *roubles* per animal. The *arabas* were delivered at Chikishliar on the 26th September* (8th October), and till the end of the Expedition were specially employed in the transport of sick and wounded between Bámi and Chikishliar.

To form the pack transport, 150 Kirghiz horses were told off on the 5th (17th) September, and 5 non-commissioned officers and 50 men of the 1st Shirván and 3rd Apsheron Regiments were detailed to take charge of them. They were supplied with 120 rounds of ammunition each. The corps was formed at Mulla-Kári,† and pack-saddles supplied from the 500 delivered at Krásnovodsk from the stores of the Warsaw Military District.

In the first half of November the transport of supplies from Chikishliar to Duz-Olum for the advanced posts had been finished, and in the second half of the month Társakan, Khwája-Kala, and Band-Hassan were supplied with provisions and forage to last till 1st (13th) July 1881. During November 8,000 cwt. of oats had also been brought up to Bámi from Duz-Olum. Almost all the transport work on the Atrak line had been done by the camels hired by Gromoff from the Turkumáns and afterwards impressed. On the 1st (13th) December 1880 there were the following amounts of supplies at Bámi (exclusive of those which had been sent to the front with the first three columns, as will be mentioned farther on) :—

	Cwt.		Cwt.
Rye flour	... 6,101·44	Salt	... 121·28
Biscuits	... 11,418·88	Pepper	... 5·12
Buckwheat groats	... 6,732·8	Laurel leaves	... 5·12
Oats	... 5,664	Wheat flour	... 892·48
Horse biscuit	... 2,789·44	Rice	... 1,462·08
Men's compressed food	1,803·84	Tea	... 116·16
Fruit acids	... 253·44	Sugar	... 655·36
Ghee	... 37·76	Garlic	... 3·2
Spirits	... 969·3 gallons.		

Thus in round figures there were five months' provisions for the Army of Operations (7,000 men) and a month's supply of oats and horse biscuits for 3,000 horses.

On the 21st November (3rd December), the Commander of the Expedition gave orders for the issue from the 1st (13th) December of eight glasses (*churas*) of spirits per man and per month, and for a two months' supply of it to be brought to Bámi, if not already there.

At Micháelovsk there were on the 1st (13th) December 11,200 cwt. of provisions, 14,400 cwt. of oats, and 2,240 cwt. of ship's provisions, mostly rice and salt. At Krásnovodsk there were at the same date 2,560 cwt. of provisions, 53,120 cwt. of oats, and 3,520 cwt. of ship's provisions. Part of these supplies were brought up as required from Micháelovsk to Bála-Ishem, where a depôt was formed.‡ At the end of November a lateral supply depôt was also formed in Persia.

Thus General Skobeleff had the following *data* on which to base his plans :— (1) five months' supplies for 7,000 men, and a month's oats and horse biscuits for 3,000 horses had been stored at Bámi; (2) the lines of communication were so organized that 9,600 cwt. of supplies could be brought up every month to

* Diary of the Staff of the Trans-Caspian Field Force, No. 22 of 1880.—*Author*.

† General Order, Trans-Caspian Field Force, No. 251, dated 5th (17th) September 1880.—*Author*.

‡ The Décauville Railway could carry 640 cwt. of stores daily to Bála-Ishem.—*Author*.

Bámi; (3) supplies had been collected in Persia near Gok-Tapa for 8,000 men for 2½ months, and for 3,000 horses for 3½ months; (4) supplies for three months for 8,000 men had been collected at Duz-Olum as a reserve; (5) the Atrak line was provided with supplies for its garrisons and for detachments on the march for seven months to 1st (13th) July 1881; (6) the fortified camp at Bámi had been put into a state of defence.

The number of guns detailed for service with the Army of Operations and those available for the armament of the posts in the *oasis* have been mentioned above, and in November the artillery in the district was reinforced by two 9-pounder guns for the armament of Chikishliar and by ten 18-pounder mortars, which arrived at Chikishliar in the end of November, and also 3,000 shells. In the first half of November, 4 Gatling guns were brought up from Band-Hassan and Khwāja-Kala to Bámi. In that month also the last rounds of ammunition were sent up from Chikishliar to Bámi, the general total brought up to the 1st (13th) December being 18,121, of which one-third were sent forward with the advanced columns. The detail of the rounds for these guns was as follows:—

Description of gun.	No.	Total number of rounds.	Rounds per gun.
Light new-pattern steel	24	5,320	221
9-pounder bronze	17	1,216	174
4-pounder bronze (in mobile batteries)	16	5,697	356
4-pounder bronze (for armament of Bámi and posts)	8	912	114
Mountain	10	3,826	382
Mortars	6	1,000	166

To the above must be added the Naval Battery and 4 gatling guns—in all 85* pieces.

By the 1st (13th) December there had also arrived at Bámi 4 heavy new-pattern steel-guns, 10 mortars, and 2 mountain guns of the Turkistán Army, making the total number of guns, including those which were expected, but which did not arrive, 97. Of those, eight 4-pounder guns and 4 mitrailleuses were told off for the armament of Bámi and the fortified posts. By the same date 1,525,000 rounds of infantry and 340,000 of cavalry ammunition had been brought up to Bámi.†

After the concentration of the 6th Battery 21st Brigade at Bámi, General Annenkoff mobilized two 4-pounder bronze rifled guns taken from the armament of Krásnovodsk, and sent them up the Micháelovsk line to form part of escorts for convoys.

In November hospitals with 50 beds each were formed by the Red Cross Society at Yágli-Olum and at Khwāja-Kala, and by the liberal assistance of this society those at Duz-Olum and Bámi were furnished with all supplies required for 200 beds when they had only 100 each. The society also furnished the 1st Battalion Sámur Regiment with a hospital of 20 beds, and established a bandaging station with 20 places for wounded on one-horse carts. The No. 4 temporary field hospital, which was detailed for duty with the advanced force, had not arrived at the time of its advance from Bámi, nor had the divisional hospitals of the 19th and 21st Divisions; so, at General Petrúsevitch's request, Prince Shakovski, the Plenipotentiary of the Red Cross Society, formed a field hospital with 100 beds on the 1st (13th) December at Bámi, and sent it forward with this force. Finally, the society took over the removal of the sick and

* The figures are those of the original, but do not agree.—J. M. G.

† 700,000 had been sent with the advance columns before the 1st (13th) December.—*Author.*

wounded on the Atrak line, 50 Government *arabas* being lent to it for the purpose. In November the Government steam sloop *Sháh-Nusr-ud-Din* was fitted up for the transport of 45 sick.

In November the weather was generally cold; and, while during the day the temperature rose to 66° F., at night it sank to 41°. Sometimes for several days together the hills were covered with snow, and thick fogs lasted nearly every day till 9 or 10 A.M. In the valley of the Atrak it was warmer than in the Akhál *oasis*, and there were more rainy days, which considerably impeded the march of the camel convoys. Thus, for example, one convoy took five days to march the 31½ miles from Chikishliar to Karája Bátor.

The difficulties experienced by the troops in their concentration at Bámi caused General Skobeleff to issue the following order:—"The Commandant of the Atrak line has laid before me the following telegram from the Commandant of the station of Társakan, dated 1st (13th) November: 'Rain has fallen during the night, and the road has become very soft, therefore the convoy will not march to-day.' It is strange to read that ordinary rain should stop the march of a military convoy. For stopping a convoy for such a trifling cause I relieve Captain * * * from his functions, and I direct that he be confined to his quarters for three days. Major * * * is reprimanded for permitting such a misdemeanour in war time. The troops are warned that even after extraordinary rain a convoy must not halt, but advance all the same; for neither the hardships of a winter campaign, nor sickness, nor bloody combats with the enemy can be allowed to hinder the execution of the will of His Majesty. Strong in their heroic resolve to carry out the plans of our adored monarch, the troops under my command will bear everything, will conquer everything; for God and the Tsár are with us.

"There is still time; let all who are not strong enough in soul or body leave our splendid ranks. Our military task will be finished all the same, and without those, who are weak in energy, we shall be more of one mind and stronger, and shall again glorify the flag of our Fatherland which has been entrusted by His Majesty the Emperor to our steel-like Russian endurance and to our Russian manliness."*

In November there were few rainy days in the *oasis*, and the advance from Bámi on Gok-Tapa was carried out without impediment and over hard ground.

The Temporary Commander of the Troops arrived at Bámi from Duz-Olum on the 4th (16th) November. After inspecting the troops and the supply-depôt on the 10th (22nd) November, he visited Kizil-Arvat, and on the 13th (25th) returned to Duz-Olum. Among his last orders before the advance began was the nomination of Major-General Bronevski, the Commander of the 1st Brigade, 19th Division, who arrived at Chikishliar on the 28th October (9th November) to the charge of the Atrak line, while Colonel Artsishevski was placed in command of the combined brigade of cavalry formed for the projected operations in Akhál-Tekke, and composed of 5 *sotnias* of the Taman Cossacks under Count Orloff-Denisoff, Aide-de-Camp, and a combined regiment consisting of 3 *sotnias* of the 5th Orenburg Cossacks, and two of the Lába Cossacks under Lieutenant-Colonel Mohrenschild.† On relieving Colonel Artsishevski from the duties of Commandant of the Atrak line, which he had fulfilled since the 17th (29th) May, the Commander of the Expedition issued the following order:—"In nominating Colonel Artsishevski to the command of the combined

* General Order, Trans-Caspian Field Force, No. 445, dated 13th (25th) November 1880.—*Author.*

† General Orders, Trans-Caspian Field Force, Nos. 455 and 494, dated 13th (25th) and 18th (30th) November 1880.—*Author.*

Cossack Brigade, after his having held the post of Commandant of the Atrak line for a period of six months during a most difficult time, when everything was still being organized and everywhere carelessness reigned, I cannot but express my entire satisfaction with the manner in which he has performed his duty. Supplies, ammunition, guns, and hospital stores had to be carried up, the sick removed, the service of the line organized, bakeries and baths established, hay collected, supplies transported for the hospitals and ambulances, and in general all kinds of details attended to daily, not only for the whole Force, but for the separate services. In six months of the hardest possible work the organization of the line has been placed on a sound footing, and that in spite of all the efforts of the enemy. Never were difficulties met with but to be conquered, and all that I attribute to the entire devotion to his duty shewn by Colonel Artsishevski in all cases. I am glad to be able to say this, and to publish to the troops of the Trans-Caspian District my heartfelt thanks to this officer.”*

The remaining corps of cavalry of the Army of Operations, *i.e.*, the division of Dragoons, the 1st and 2nd *sotnias* of Póltáva Cossacks, and the horse mountain division, were formed into a cavalry reserve under Colonel Prince Erístoff, the Commander of the Póltáva Cossacks.†

For the extraordinary expenditure of the station commandants at all points along the Atrak line, sums were assigned from which they were to pay scouts for news brought in, receive and entertain natives who came in with offers of service, and meet the cost of special messengers on the line, &c. As the various posts on the Atrak line had the same duties to fulfil as regarded the natives, these extraordinary sums were regulated by the importance of each particular post. Thus the Commandant at Chikishliar received 50 *roubles*, that at Karája-Bátir 10, at Yágli-Olum, Társakan, and Band-Hassan each 15, at Chát 20, at Duz-Olum 40, and at Khwája-Kala 30 *roubles per mensem*.‡ In addition, the station commandants received advances for unforeseen expenditure, such as repairs to transport waggons, purchase of ropes, and other expenses frequently incurred, according to the following scale :—At Chikishliar and Bámi, each 500 *roubles*; at Karája-Bátir, Chát, Társakan, and Band-Hassan, each 100; at Duz-Olum 300; and at Khwája-Kala 200 *roubles*.§

In view of a winter campaign all commanding officers were requested to pay special attention to the equipment of the men in all particulars, and General Skobelev issued the following order :—“ Under the arrangements made by the Staff of the Force, almost all the troops have been supplied with articles of warm clothing, such as fur-coats, knitted waistcoats, felts, and warm foot-cloths. In the event of any deficiencies, indents are to be made by telegraph or by special messenger. In the stores there are 14,000 pairs of boots ready made, and commanding officers are to indent upon the Intendance so as to give each man two pairs. They are also to carefully inspect the clothing, boots, and equipment of the men, and in general satisfy themselves that the troops under their command are ready to take the field. The arms of all corps are to be inspected, cleaned, and repaired, special attention being paid to the state of the cartridges. A supply of olive-oil is to be taken, as the use of it facilitates the extraction of the cartridges. The intrenching tools are to be seen to and their cases fitted to the men. Each company should have 80 Linnemann spades and 20 Linnemann axes, each *sotnia* or squadron 30 spades and 15 axes, and each

* General Order, Trans-Caspian Field Force, No. 501, dated 9th (21st) November 1880. — *Author*.

† General Order, Trans-Caspian Field Force, No. 494, dated 18th (30th) November 1880. — *Author*.

‡ General Order, Trans-Caspian Field Force, No. 461 dated 14th (26th) November 1880. — *Author*.

§ General Order, Trans-Caspian Field Force, No. 460, dated 14th (26th) November 1880. — *Author*.

battery 20 spades and 15 axes. The men are to be cautioned to be very careful in looking after and carrying these tools, for at critical moments of an action they may save hundreds of lives. On the 30th and 31st August (11th and 12th September) 1877 before Plevna, the men had to throw up works with their mess tins, bayonets, and even their hands on account of the deficiency of these tools. All camp kettles, boilers and tea-urns are to be carefully tinned, and spare materials for tinning them provided. All corps are to have bandaging materials, field hospital, pack-saddles, and other medical and surgical *matériel* and stores as laid down by the Principal Medical Officer of the Force; and there are also to be taken two stretchers per company, *sofnia*, squadron, and battery, with six bearers per company. The latter are to be taught their duties, and are to be chosen from amongst the best men of the company.

On taking the field, corps are to leave at their stations, under command of the station commandants, all the men noted by the medical officers as unfit to take the field.

Marches will always be regulated by special orders, in which will be laid down the modifications imposed by time and circumstances; but in general the following regulations are to be adhered to:—No man may remain behind of his own free will. The soldier may be left behind by order of his commanding officer, or by reason of illness; but in neither case without notice being given to the company, *sofnia*, squadron, or half-battery commanders, who must at all times be able to account for their men. All stragglers are to be severely punished. I recommend that all stockings and foot-cloths be greased with tallow, which prevents frost-bite or chafing. Commanding officers on arriving at camping grounds and at halts in bad weather are to make enquiries as to whether there are any men with colds or frost-bite, and are to take their measures accordingly. In the field the men's feet are not to be wetted except in cases of necessity. When a halt is made for a day, the boots are to be inspected and put in order, and I will personally see to this. Special care is to be taken that the men have awls, waxed thread, ordinary thread, needles, &c.*

"On the concentration of the troops in the Akhál *oasis*, the following regulations are to come into force:—

- (1) Daily returns are to be laid before me showing the distribution and strength of, and the amount of supplies with the various corps, hospitals, parks, and convoys, the number of casualties, the ammunition, &c.; expended, and the state of the artillery, engineer, and supply-depôts which are so important in this country; and finally, in a special and broad column, there is to be entered by each corps with the utmost candour and with full confidence in the entire and hearty devotion of the Commander of the Expedition to his splendid troops whatever is required for the corps in the broadest sense of the word. I warn all that I will pay especial attention to this column as characterizing the corps and its commander in particular.

When corps are concentrated, these returns are to be prepared by regimental commanders and persons with equal powers, and in the artillery and engineer branches by the heads of those branches. The commanders of camel, pack-horse, or wheeled convoys with the Army of Operations have the same duties. Every detachment,

* General Order, Trans-Caspian Field Force, No. 479, dated 16th (28th) November 1880.—
Author.

from a section upwards, is to send in its returns independently, through the proper channel, to me during the whole time it remains detached.

Daily returns of the state of health of the troops are to be laid before me by the principal medical officer, with a special column for his remarks and proposals, and I would remark that the well-known maxim of Thiers, "*administrer c'est prévoir*," has special application to his department. I should like all the returns from the troops to be made in this spirit, and I would again repeat that these remarks will be the basis on which I shall form my opinion of the military administrative capabilities of commanding officers on active service. All these returns, numbered according to precedence of corps, are to be laid before me not later than 9 P.M., except in very special cases which in principle I do not recognize, as I tried to show to the troops under my command at dawn on the 7th (19th) July. It is necessary that all these remarks should be made in strict accordance with the actual state of the case, and that they are never to be turned into picturesque lamentations by commanding officers.

- (2) In important cases, corps must without delay inform the head-quarters staff of any orders received by them, for in war only the actual execution of orders is of value. The Chief of the Staff of the Force must see to this either personally or through his subordinates. The cavalry in advance of the force must keep me informed of everything, and send in sketches of good places for the bivouac, with special marks to show where the camels and other animals are to be pastured, and also the watering places. The troops in their reports are to avoid using empty or vague phrases, such as 'in advance,' 'in rear,' 'on the flank,' &c., but always indicate 'north,' 'east,' &c. As regards streams, rivulets, ravines, &c., the orders given before Inkermann must always be remembered.
- (3) The commander of the advanced guard must send me daily, besides all the information he has gathered personally, the originals of the reports received by him. I shall read all and form my conclusions from them. In war nothing is too trifling, and therefore everything is to be sent.
- (4) On returns and reports concerning the troops and military operations being laid before me, only those matters which have been carried out are to be marked with black ink, so that the staff may answer for their execution. Everything else is to be marked with red ink. I must again insist that in war the giving of orders is of little importance compared with their execution. To keep me informed of the orders already executed and those awaiting execution is one of the most important duties of the staff, and I recommend this to staff officers as the result of my experience in many wars.
- (5) Orders are to be given that the troops advancing into the *oasis* are to take with them not only their own artificers, but those of the first battalions of the 73rd and 74th Regiments, which are stationed nearer the bases of supply. Commanding officers are responsible for the proper quantity of waxed and ordinary thread, needles, and spare boot-leather being taken, and each company ought to have two tailors and four shoe-makers. Besides, it is desirable to have in each battalion on the war footing 2 collar-makers, 2 smiths, 6

millers, 12 bakers, and 4 butchers. These should be considered as a reserve, for circumstances may force us to grind corn and open artificers' shops.

(6) The Red Cross Society is to be requested to issue to each man a packet of bandaging materials of the Russian pattern.

(7) The order directing the troops of the Army of Operations to be provided with cholera belts is confirmed.*

The Trans-Caspian District was declared to be under martial law.†

As the construction of fortifications at Chikishliar was impossible on account of the sandy soil, the Commander of the Expedition had left 3½ companies of infantry and 2 mitrailleuses there as garrison, and had also added two 9-pounder guns to this force. As there was a possibility, owing to the abundance of water in the desert in winter, of bands appearing on the Atrak line and attacking Chikishliar in spite of all precautions, General Skobelev requested the Commander-in-Chief of the Army of the Caucasus to send to Chikishliar, if so requested by the Commandant, the gunboats of the Astrábad naval station, and suggested that their crews should be landed. General Skobelev paid particular attention to Chikishliar, because, as he said, "every alarm there is repeated in a manner extremely unfavourable to us both in Europe and in Russia."‡ The Commander-in-Chief ordered the Commandant of the Port of Baku to arrange for this.§

The Commandant of the Atrak line was ordered to take all precautions against surprises, as the garrisons had to fight against an enemy versed in this species of warfare. If in extreme cases they were unable to hold out, they were to retire to the nearest fortified point. Special care was to be taken to maintain communication between posts. General Bronevski was instructed to send an increased number of scouts beyond the Atrak, and report daily in cypher to the Russian Ambassador at Teherán to ask for his co-operation.|| As the country was under martial law, Bronevski was ordered, in the event of bands of Gokláns or Yamúts appearing on our bank of the Atrak, "to annihilate them altogether, without asking for special instructions."¶

Finally, General Skobelev telegraphed to the Chief of the Staff of the Army of the Caucasus:—"Before the advance of a force for decisive operations, persons usually join it for special service, and to be placed at the disposal of the commander. These destroy the unity of administration and the spirit of the troops before the battle. I respectfully ask Your Excellency to endeavour to free my troops from their presence."

* Diary of the Staff of the Trans-Caspian Field Force, 1880, No. 26, pages 247 *et seq.*—*Author.*

† General Order, Trans-Caspian Field Force, No. 400, dated 20th October (1st November) 1880. In consequence of the district being placed under martial law, the Commander-in-Chief of the Army of the Caucasus gave the following orders:—

"The Civil Governor will act as a Military Judge, and will award punishments according to military law for revolt against the supreme power, treason, and the crimes laid down in sections 117, 118, and 257, Chapter III, and section 270, Chapter XXIV, of the Code of Military Law, 1879, 2nd edition; and in special cases also for the crimes mentioned in section 279 of the same book and the Code of Russian Laws:

"Women were only to be tried by a military court when they had committed crimes in company with men, the females being punished according to the Code."—General Order, Trans-Caspian Field Force, No. 553, dated 24th December 1880 (5th January 1881).—*Author.*

‡ Telegram from General Skobelev to General Pávloff, No. 2036, dated 28th October (9th November) 1880.—*Author.*

§ Admiral Svinkin's telegram, No. 1113, dated 17th (29th) November 1880.—*Author.*

|| Telegram to Bronevski, No. 7996, dated 20th November (2nd December) 1880. In Appendix No. LXXI, see the instructions given by the Commander of the Expedition to General Bronevski under date 15th (27th) November 1880, No. 7588.—*Author.*

¶ Instructions from Skobelev to Bronevski, No. 7589, dated 15th (27th) November 1880.—*Author.*

CHAPTER XIII.

The Sári-Kámish detachment—March of the detachment under Colonel Kuropátkin from the Amu-Daria to the Akhál-Tekke *Oasis*.

It was decided in 1879 to send a scientific expedition to examine the possibility of turning the waters of the Amu-Daria into their old bed, and the command had been given to General Glukhovski.

The military operations against Akhál-Tekke, which had ended in failure, prevented the carrying out of the projected surveys, which were at first put off for a year, and finally were postponed until a more favourable period.

As, according to the plan worked out in St. Petersburg, the operations in Trans-Caspia were to be conducted not only along the line of the Atrak, but from Krásnovodsk also, the Minister of Communications entered into negotiations with the Minister of War for the Amu-Daria Expedition to be carried out in 1880.

Admiral Posiet proposed to carry out the exploration of the old bed of the Amu by sending two parties towards it—one from the Khánate of Khiva, and the other from Krásnovodsk or the Gulf of Micháelovsk.

The War Minister agreed to this, but made it a condition that the work of this exploring expedition should be made to fit in with the distribution and movements of the Trans-Caspian Field Force.*

General Skobelev, recognizing the importance for Trans-Caspia of the projected exploration of the old bed of the Amu-Daria, thought it quite possible to take from the sums at his disposal the amount required for Glukhovski's Expedition (48,640 *roubles*), but on the express condition that the Uzboi Expedition should not only be made subservient to the march of military operations, but that it should be under his personal orders.†

The appearance of Tekke parties between Kuhna-Urganj and Sári-Kámish caused the "Sári-Kámish Force" to be formed at Balikli, with the task of protecting the exploring expedition and the communications between Trans-Caspia and Khiva.

General Skobelev, on hearing this, pointed out to the War Minister that the safety of the scientific expedition could not be assured unless the force protecting it were brought into communication with the Caucasus troops operating from the Caspian, and that, if General Glukhovski were to act independently, he would be forced to detach some of his own troops to keep communication open with Khiva. "The state of affairs here is so serious," he telegraphed to St. Petersburg, "that, if a system of moving small independent forces into the steppe be adopted, I disclaim all responsibility for any misfortunes which may befall them."‡

General Kaufmann also considered it necessary that close communication should be kept up between the Caucasus troops and the Sári-Kámish Force, but he at the same time thought it necessary to connect this force with Petro-Alexandrovsk, whence in case of need it might draw reinforcements, and whither, for this purpose, 3 *sovnias* of Cossacks had been sent from Sámarkand.

* Letter from Count Heiden to General Skobelev, No. 77, dated 20th March (1st April) 1880.—*Author*.

† General Skobelev's letters to Count Heiden, Nos. 79 and 118, dated 23rd March (4th April) and 15th (27th) April 1880.—*Author*.

‡ General Skobelev's telegram to the Chief of the Staff, dated 13th (25th) May 1880.—*Author*.

General Kaufmann considered it possible, if General Skobelev considered it necessary, to put the Sári-Kámish Force temporarily under his command; but he was also of opinion that a decision of the question as to where the force was to be stationed was premature, pending the development of scientific operations.*

On receipt of General Skobelev's opinion, the War Minister thought it indispensable to carry out the work of Glukhovski's expedition simultaneously from the Amu-Daria and from Krásnovodsk, and accordingly gave orders for it to begin work from the left bank of the Amu, and be brought gradually up to the Uzboi, on which surveys were not to begin before September. Only then was the small force told off for the protection of the expedition to be moved into the desert; and, in communication with the Commander of the Amu-Daria District, the point was to be determined to which it might advance, according as the question of its communications with the Trans-Caspian Field Force was settled.†

Thus, the proposition made at St. Petersburg to put the Turkistán Force under the orders of the Commander of the Akhál-Tekke Expedition was not carried into effect, or that of making this force serve as a link between Khiva and the Trans-Caspian Field Force.‡

The Sári-Kámish Force, consisting of 4 companies, 2 *sotnias*, 4 guns, and 2 rocket-troughs, under Lieutenant-Colonel Krabbe, was moved to Balikli on the 10th (22nd) June, and remained there till the beginning of September. On the arrival of the Commander of the Amu-Daria exploring expedition, the force was put under his orders.

General Glukhovski, on his arrival at Petro-Alexandrovsk, informed General Skobelev that his advance would be directed on Ortakui, and that the Sári-Kámish Force would be moved forward along the caravan route from Zmukshir to Kizil-Arvat to the wells of Chágil. As far as his means permitted, he would dig wells and take all possible measures to ensure the passage of the waterless desert. Foreseeing the limited means of his force, he had requested the Commander of the Akhál-Tekke Expedition whilst at St. Petersburg to defray from the sums allowed for the latter the cost of constructing wells along the road, so that there might be no delays in the advance of the force nor in the works. "The money spent in creating a base in Khiva must not be regretted," wrote Glukhovski, "for it will be repaid an hundred-fold. Winter is coming on; your troops will require everything. The Tekkes can give nothing, while Khiva can furnish all." He also sent a list of the actual prices of some articles of consumption in the Khánate.§

General Skobelev shewed how important he considered the keeping open of communication with the Sári-Kámish force by sending columns of suitable strength from his force to the borders of the Akhál-Tekke *oasis*, and he thought that Zmukshir was a good base for operations in this direction. If it was doubtful that the road from Zmukshir to Igdi was the best (of those known to us) for direct communication between the Akhál-Tekke *oasis* and Khiva, it was beyond all doubt that, if it were decided to move troops along it, great caution must be exercised.

General Skobelev wrote to General Glukhovski that if he thought of making the wells of Chágil his objective point, it was not less than three days' march

* General Kaufmann's telegram to General Skobelev, No. 176, dated 29th May (10th June) 1880.—*Author*.

† Telegram from the War Minister to General Skobelev, No. 719, dated 3rd (15th) June 1880.—*Author*.

‡ It has been mentioned above that General Kaufmann thought it impossible to place a force at Igdi to cover the communications, or that camels and supplies could be sent to Trans-Caspia along it.—*Author*.

§ Letter, dated Petro-Alexandrovsk, 27th August (8th September) 1880.—*Author*.

for infantry and camels to those of Kizil-Chakir. From the latter to Nafas-Kuli no less than 106 miles without water intervened; but, if the small amount and bad quality of the water in those wells were considered, the waterless tract might be taken at 153 miles from the wells of Chágil. Reckoning $16\frac{2}{3}$ miles (25 *verst*s) as a day's march, it would take 9 days to traverse this distance. Experience had shewn that a man requires 2·7 gallons of water *per diem*, and so allowing for leakage, evaporation, &c., it would have to be calculated for 27 gallons per man, or, for a company of 150 men, 4,050 gallons. Allowing 27 gallons as the load for a camel, 150 camels would be required to carry water alone. The road from Igdi to Kizil-Arvat, which lay through sands, was also very difficult, but it was very important for us to become acquainted with this road. The experience of the Khivan campaign had shewn that these same terrible deserts, in which our troops perished in their advance on Khiva, were easily traversed on the return march, and a knowledge of the desert is only to be acquired by continually moving through it.

General Skobelev, moreover, did not advise Glukhovski to undertake at his own risk such a march with a portion of his force. "I was in this desert seven years ago," he wrote to him, "and therefore my information cannot be considered as conclusive. It must not be forgotten that in 1873 the Staff of the Army of the Caucasus proposed to form a base for supplies and water at the wells of Daudir, from which they intended to reach the Khánate in April 1873. It appeared that 60 years before there had been water at Daudir, but that in 1873 the wells had been filled up by huge sand-hills, and I and my companions almost perished in consequence of this defective information. Such lessons are not given for nothing. I therefore propose to Your Excellency to lay everything before General Aide-de-Camp Kaufmann, who alone has sufficient experience in steppe campaigns, and can give the authority and supply the means for such a movement. If General Aide-de-Camp Kaufmann approves, it is desirable, if assistance is to be afforded to my troops, that the movement should take place as soon as possible, and be carried out by the Igdi-Kizil-Arvat route or through that of Igdi, the Daulat wells, and Bámi." Regarding the Khánate of Khiva as a base for the troops in Trans-Caspia, General Skobelev expressed his opinion that it was of importance, but that the Russian soldier would have to clear the route for caravan communication as elsewhere in Central Asia.*

Besides exploring the old bed of the Amu and carrying out the levelling works, General Glukhovski undertook on his own initiative, *i.e.*, without being requested by General Skobelev, the work of digging wells on the route between Zmukshir and Ortakui, and guarding it by the establishment of a chain of fortified posts. In the beginning of October he left Chágil for the wells of Kiziljá-Kuyúsi with a company, 4 guns, and 15 Cossacks; but, on arriving there, it was not only found impossible to bring up the rest of the troops from Chágil, but, on account of the want of water, all the artillery horses had at once to be sent back to Chágil. The camels had to be taken $6\frac{2}{3}$ miles to water at the wells of Sakar-Chaiga, and had then to be driven out to Chágil to pasture. While taking measures to increase the quantity of water at Kiziljá-Kuyúsi, General Glukhovski sent on the 5th (17th) October half a company to Sháh-Senem, and on the 7th (19th) 40 infantry to Giaur-Kala to dig wells. These troops had to be provided with water from Kiziljá-Kuyúsi and even from Chágil. Although the digging of wells was extremely difficult and even dangerous on account of the dry soil continually falling in, the work was

* General Skobelev's letter to General Glukhovski, dated Krásnovodsk, 3rd (15th) October 1880.—*Author*.

finished. The water, except at Sháh-Senem, was found to be fit for drinking, and at Giaur-Kala quite fresh. In order to protect the wells, they were encircled by field works, a redoubt for half a company being constructed at Chágil, one for a company and 2 guns at Kiziljá-Kuyúsi, and another for half a company at Giaur-Kala.

On the 28th September (10th October) a convoy of 29 camels laden with various goods was detained by our troops at Kiziljá-Kuyúsi, and with it were 12 men (5 Tekkes and 7 Yamúts), 1 woman, and 3 children. The men accompanying the caravan had arms and tried to defend themselves, but were disarmed. On searching them four letters of identical contents were found addressed to the Khivan dignitaries, Diván-Begi-Mát-Murád, Islám-Mihtar, Ibrahim Khwája, and Musa-Mutavali-Ishán, and sealed with the seal of Khan Muhammad Atalik, a Tekke who, from the time Bámi had been occupied, had always been considered in Trans-Caspia as a zealous champion of peace and a well-wisher to our cause. "The unbelieving Russian troops," he wrote, "are advancing upon us. They tried to reach the water at a distance of one *tásh** to the south of the fortress, but we prevented them from doing so, and followed them to Bámi.† They are now at Alan-Bámi. Our scouts, our best *jigits*, and the leaders of bands have killed some of their soldiers, seized their arms, and returned with their booty. We are very glad of this, and have resolved with one mind to defend ourselves. We are now living in Dangil-Tapa. Firstly, by the grace of God, and, secondly, thanks to the good condition of our people, we are living peacefully and as one man. The unanimity and firmness of the people have made us resolve to fight the Russians. Our hope is that you will stand fast for the integrity of Islám and the true faith entrusted to you, and our people will fight with this idea. We have despatched your servants from Kuhna‡ to you, and we hope that they will reach you. We request you to give advice corresponding to the hopes of our people. If you have anything to communicate to us from your side, do not deny us the favour of a letter."

On the 6th (18th) October a second caravan, with which were 2 men, 4 women, and 11 children, was seized. On questioning them, it appeared that the men, Yamúts from near Krásnovodsk, who had been to Akhál to buy back their wives and children captured by the Tekkes in 1879, were now returning to their homes through Khiva, where they had relations. From the information gathered from these two caravans, it appeared that at the wells of Alti-Aji, Khair, and Yánik-Muhammad-Yár there were numbers of Tekke camels, and at the wells of Irband 1,500 sheep, and that everywhere the cattle were guarded by armed men. In order to ascertain the truth of the news received and to drive off the cattle, General Glukhovski sent a party of Khivan Yamúts by Laila to the wells of Shaikh and Irband, but they not only failed to execute their mission, but two of their number were taken prisoner. In spite of all this, on occupying Giaur-Kala, General Glukhovski sent a picquet of five Yamúts to the wells of Charishli to open up direct communication with Krásnovodsk, and to them he entrusted some papers and letters for the latter place. On arriving at Charishli the picquet was fired at by Tekkes, who tried to capture it. In their quick retreat the *jigits* lost several things, among which was the packet of papers, &c.

As, according to the reports received by General Glukhovski, the abundant wells of Charishli were usually used by the Tekkes as a *rendezvous*, whence they, after leaving their *kibítkas*, property, and camels, started in light order on their

* A *tásh* is from 4 to 5½ miles.—*Author*.

† Here evidently the reconnaissance of July 6th (18th) is spoken of.—*Author*.

‡ Kuhna-Urganj.—*Author*.

best horses to raid, he resolved to occupy them. With this view he sent Lieutenant-Colonel Krabbe to the wells of Uáz, so as to be able to act from thence either against Charishli or along the Kuhna-Daria, from whichever side danger threatened. It was necessary to carry out this measure quickly, for on the 21st October (2nd November) General Glukhovski had received a report that the Tekkes had already plundered the Yamúts and Kirghiz;* that they would advance from Gok-Tapa by the wells to Laila; that the advanced horsemen were already at Charishli; and that the main body was moving on Ortakui. On the 25th October (6th November), he also heard that a small body of Tekkes had attacked a picquet of four Ural Cossacks near Kiziljá-Kuyúsi. The Cossacks, surrounded on all sides, had defended themselves desperately, and two had been already wounded, when they were saved by the timely arrival of infantry and Cossacks. The Tekkes lost one man and one horse killed. As if to confirm these reports, the force at Giaur-Kala was alarmed several times during the nights of the 29th and 30th October (10th and 11th November).

This forced General Glukhovski to countermand the movement to Petro-Alexandrovsk of a company which had been detailed to form part of the force being equipped for the march to the Akhál-Tekke *oasis*, and at the same time to request the Commander of the Amu-Daria District to send him another company of infantry. As from the reports received, it might be supposed that the Tekkes would advance both from Ortakui or Charishli and Laila, General Glukhovski thought it best to move to Giaur-Kala, and thence act according to circumstances. It must be remarked that, as General Glukhovski reported to General Skobeleff, after digging wells at Chágii, Kiziljá-Kuyúsi, Sháh-Senem, and Giaur-Kala, he could move boldly either on Ortakui or on Charishli; but since he had no funds at his disposal, he could not act thus freely. To this were added the following unfavourable circumstances.

In the beginning of September provisions had been sent to last till the 1st (13th) November, but on arrival at Zmukshir there was no forage. With great exertions enough to last till December was collected. In the meantime October had been reached, and there was the apprehension lest the provisions would not last till November; and without them there could be no freedom of action. By the end of October, however, both money and provisions for the force arrived, and General Glukhovski then resolved to advance immediately.

On the 2nd (14th) November he left Kiziljá-Kuyúsi with 2 companies, 4 guns, and a *sołnia* for the wells of Charishli,† but found no Tekkes there. This march, as he reported, produced a "quieting influence on the steppe and in the Khánate, and at once put a stop to all rumours as to the strength of the Tekkes, against whom, it was reported, we dare not fight on account of our small numbers."‡

From Charishli, General Glukhovski on the 9th (21st) October sent a company to Ortakui, and thence to Giaur-Kala, to explore the road, and himself returned to Chágil; and, as the cold weather was coming on, he, by order of the Officer Commanding the Troops in the Trans-Caspia, proceeded to break up the force, which on the 8th (20th) December returned to Petro-Alexandrovsk.

* A Kirghiz caravan, marching from Khiva and halted at Kumjul near the head of the former Gulf of Ak-Chaganák, was plundered by the Tekkes, who carried off 335 camels with their loads and 20 horses, the Kirghiz losing 5 killed (Report from the Prefect of Mangishlák to the Commander of the Trans-Caspian Military District, No. 1694, dated 15th (27th) November 1880).—*Author*.

† His route was 2nd (14th) November Sháh-Senem, 3rd (15th) Giaur-Kala, 4th (16th) Kanga-Cheyun, 5th (17th) Charishli (General Glukhovski's letter to General Skobeleff, No. 369, dated 19th November (1st December) 1880).—*Author*.

‡ General Glukhovski's Report to the Officer Commanding the Troops in Trans-Caspia, No. 353, dated 8th (20th) November 1880.—*Author*.

General Kaufmann, in his report to the War Minister upon the operations of the exploring expedition along the old bed of the Amu-Daria, wrote: "Military considerations prevented Major-General Glukhovski from successfully carrying out the purely scientific part of his task.* General Glukhovski himself reported to General Skobelev that the road to Ortakui was explored, repaired, and provided with water, and that there could therefore be now no difficulty in moving along it. "I am very glad to congratulate Your Excellency," he wrote, "upon the fact that the road to Ortakui has been transformed from an impracticable one to one so easily traversed that I am now sending Colonel Kovalevski with a *sotnia* of Cossacks to Ortakui to facilitate the march of Colonel Kuropátkin's column. I am very glad that the money given by you for the expedition has been spent so profitably for your own purposes."†

The Commander of the Akhál-Tekke Expedition had, in July, conceived the idea of a party of Turkistán troops being brought over to take part in that expedition. He thought that the desert was only to be feared by those unaccustomed to traverse it, and that the Trans-Caspian desert was more easily passable than was generally believed. Those tracts in which our troops nearly perished in their advance on Khiva in 1873 were found to be quite practicable on the return march. The desert should not, thought General Skobelev, be neglected, but the route between the Caspian and the Amu should be popularized if we wanted to draw any benefit from the large sums laid out on the expedition. One of the principal aims of the Emperor in giving orders for the expedition was, in General Skobelev's opinion, our final establishment in the Trans-Caspian desert, and the construction of firm bonds of union between the Caspian Sea and the basin of the Amu. The attainment of these ends he considered as the guiding principle of our Central Asian policy, and called it our "great duty."‡

One of General Skobelev's first cares on arriving in Trans-Caspia was to establish communication by means of *jigits* with Petro-Alexandrovsk, by which, after the closing of the Orsk-Kázalinsk route, letters and money orders failed to reach within a reasonable time. With a view to popularizing the route, on the 19th April (1st May) he requested General Kaufmann to find a contractor for the supply of *chambárs* (leather-trousers) for a three-battalion regiment on the war footing which were to be sent by the desert route to Krásnovodsk.§ He then thought of bringing a force from Turkistán from Zmukshir *via* Igdi along a route, a part of which had been traversed by one European only, *viz.*, himself, in 1873. This route was very risky, for Colonel Markozoff's force nearly perished on it during the Khivan campaign of 1873; but it was of advantage to use it to prove that the desert could be successfully traversed. He calculated that for a force of 300 infantry, 100 cavalry, and 2 guns with 40 artillerymen, or in all 500 men and 150 horses, 800 camels carrying two months' supplies would be required. If a forced march from Kizil-Chakir to Nafas-Kuli were permitted, 400 camels would be required for water even if the cavalry were kept back at Kizil-Chakir. If in the autumn, when the heat diminished,

* Report from the Commander of the Troops in Turkistán to the War Minister, No. 9107, dated 3rd (15th) December 1880. Note by Colonel Kuropátkin on the successful working of the Expedition, approved by the Emperor, sent to explore the old bed of the Amu-Daria, attached to the report of the Officer Commanding the Troops in Turkistán, No. 5163, dated 30th June (12th July) 1881.—*Author*.

† General Glukhovski's letter to General Skobelev, No. 369, dated 19th November (1st December) 1880.—*Author*.

‡ Diary of the Staff of the Trans-Caspian Field Force, 1880, No. 51, Part II, page 2.—*Author*.

§ Diary of the Staff of the Trans-Caspian Field Force, 1880, No. 34, page 18. For 12,000 *chambárs* delivered at Krásnovodsk 54,000 *roubles* were asked, 36,000 to be paid in advance. As the prices were too high, the matter was dropped (Diary of the Staff of the Trans-Caspian Field Force, 1880, No. 24, page 36).—*Author*.

a force would be sent from Trans-Caspia to occupy Igdi and water were sent beyond Zangi-Bába to meet the Turkistán force, it would be another matter.*

In the middle of September, when the time of decisive operations against Gok-Tapa could be approximately determined, General Skobelev again insisted on the advantages of a contingent from Turkistán taking part in the military operations, and he telegraphed to General Kaufmann that, as the Sári-Kámish force was near Zmukshir, a part of it might be moved to Bámi at the end of November to take part in the conquest of the *oasis* and open out the desert in that direction. "This would strengthen the brotherhood between the different corps, and the Turkistán men would again have a chance of distinguishing themselves as they did on the Danube." In his opinion the force should march from Zmukshir by the wells of Chágil and Nafas-Kuli to Igdi, and thence either along the Uzboi to the Micháelovsk line or straight on Kizil-Arvat. In the latter case, he promised to send camels with water to meet the Turkistán troops. He undertook also to arrange for their return to Petro-Alexandrovsk. At the same time he requested that the command of the force might be given to Colonel Kuropátkin, saying—"To him alone can be entrusted such a risky movement as that from Zmukshir to Kizil-Arvat, for this much-desired march is a very serious matter, although it will be facilitated by being undertaken in late autumn. The road by Sári-Kámish and Kum-Sabshen is much easier, but it is more circuitous."†

General Kaufmann shared General Skobelev's opinion as to the importance of establishing communication between the Trans-Caspian and the Amu-Daria Districts, and saw in the detaching of a force to Akhál-Tekke a means of increasing the military experience of a part, though a small one, of the forces under his own command; so he offered no objections to General Skobelev's wishes. He proposed to detail for the march to Akhál-Tekke 2 companies and 2 *sotnias* from Petro-Alexandrovsk, and 1 company from the Sári-Kámish Force. This column was to march by Sári-Kámish and Kum-Sabshen to the Micháelovsk line, as the road by Igdi, though shorter by 166 miles, was considered impracticable on account of the want of water. However, the choice of the route was to be left to Colonel Kuropátkin. In any case, to quicken the march and reduce the difficulties, the infantry was to be mounted on camels. General Kaufmann thought that the column might arrive at Kizil-Arvat about the middle of December;‡ and as the time was short, he, pending orders from St. Petersburg, ordered Colonel Grotenhelm to detail the troops and proceed with their equipment, for which a sum of 50,000 *roubles* was required.

His Majesty the Emperor only consented to the movement of a column from the Amu-Daria to Akhál-Tekke if it could arrive in time to be of use to the Expedition;§ and General Skobelev, following up his idea of popularizing the desert, said that the arrival of the troops from Turkistán, even though late in the day, would be of the greatest benefit as a proof that the desert did not separate the Amu-Daria from Trans-Caspia. The future Trans-Caspian District would have to depend on Turkistán, and it was especially necessary that we should show Khiva, Bukhára, Persia, and Afghánistán that all our provinces can support one another if required. The forces concentrated in the *oasis* would indirectly influence the advance of those in Turkistán, and *vice versa*; and thus a conviction would be established

* General Skobelev's letter to Colonel Soboleff, No. 1, dated 1st (13th) July 1880.—*Author*.

† Telegrams to General Kaufmann, Nos. 5294 and 5377, dated 16th (28th) and 18th (30th) September 1880.—*Author*.

‡ It arrived at Bámi on the 8th (20th) December.—*Author*.

§ Telegram from the War Minister to General Kaufmann from Livadia, dated 14th (26th) October 1880.—*Author*.

in all our Central Asian possessions, which might be of great advantage to us in the winter of 1880-81, when new differences, and more serious ones than those of 1880, might be expected between us and China. General Skobelev further proposed that the strength of the Turkistán column might be reduced to two strong *sotnias*, but thought that Colonel Kuropátkin's presence in the district would be of great value for the future settlement of the Persian boundary and for the organization of the district. He also considered that the route proposed by General Kaufmann was the best of the three known to us, but supposed that, as the choice of the road had been left to Colonel Kuropátkin, the latter would choose that by Charishli or from Zmukshir by Daudir, Nafas-Kuli, and Yakej to Igdi. Since a mistake in the choice of the road might cause the whole column to perish, General Skobelev thought that Colonel Kuropátkin should be unfettered in the matter. "Personally," he wrote to the Commander-in-Chief of the Army of the Caucasus, "it may be, I should take the column from Zmukshir by Nafas-Kuli and Igdi, but that is because I know the road, but I have never advised that a force should march by it. I will answer for the road as far as my reconnaissance of 1873 goes, but I cannot advise that a force be sent into the desert without preliminary reconnaissances being made." General Skobelev, therefore, sent Cornet Stetsenko of the Taman Cossacks from Kizil-Arvat, *via* Demirjân, Dinâr, Igdi, Ivanek, Charishli, Tuz-Kir, and Kurván-Kum, to the wells of Kára-Kuduk to report himself to Colonel Kuropátkin,* and to give him details about the road. Colonel Kuropátkin, who was with the Rifle Brigade in Kuldja, was ordered to return to Táshkand, and thence proceed to Petro-Alexandrovsk, which he was to reach about the 10th (22nd) November.

The Commander-in-Chief of the Army of the Caucasus also thought it of advantage to send a small column from the Amu-Daria to Akhál, and gave Skobelev full powers to arrange with General Kaufmann regarding the strength of the proposed force, and how, when, and by what route it should march.†

On the 15th (27th) October, General Kaufmann received information from General Glukhovski that he had advanced five marches into the desert with 3 companies, 4 guns, half a *sotnia*, and a rocket division; and as it was not stated in what direction he was to proceed, General Kaufmann presumed that from Bála-Ishem he would either try to follow the line of the Uzboi by Gel-Geldi‡ and Charishli to Sári-Kámish, or would return by the same road to Zmukshir, or would move on to Igdi and try to open communication with General Skobelev's troops in the Akhál oasis. With a view to the despatch of Colonel Kuropátkin's column to Trans-Caspia, General Glukhovski was ordered to return to Petro-Alexandrovsk. Doubting whether these orders would reach their destination, the Commander of the troops in Turkistán ordered the Commander of the Amu-Daria District, if he had certain information that General Glukhovski would not return before winter set in or would return too late, to send Colonel Kuropátkin with two strong *sotnias* only to Trans-Caspia, so as not to weaken too much the forces in his district.§ General Glukhovski, however, returned from Charishli in the beginning of November, and Colonel Grotenhelm proceeded to fully equip a column of 2 companies and 2 *sotnias* from the Amu-Daria District and one company from the Sári-Kámish

* General Skobelev's telegram to General Kaufmann, No. 1887, dated 29th October (10th November), and letter from the former to the Commander-in-Chief of the Army of the Caucasus, No. 7, dated 17th (29th) October 1880.—*Author*.

† Telegram from the Commander-in-Chief of the Army of the Caucasus to General Skobelev, No. 4653, dated 27th October (8th November) 1880.—*Author*.

‡ This place is marked Getch-Geldi on the map.—*J. M. G.*

§ General Kaufmann's telegram to the War Minister, No. 1291, dated 29th October (10th November) 1880.—*Author*.

Force.* On the 10th (22nd) November the force was formed and Colonel Kuropátkin took command.

At his request, in order to increase the independence of the force, Colonel Grotenhelm added to it two mountain guns† and two rocket tubes.‡ The total strength was then 472 infantry, 318 cavalry, and 36 artillery—in all 849 men with 372 horses, 2 guns, and two rocket-tubes. 240 rounds of ammunition per rifle, two complements of ammunition for the guns, and 150 rockets were taken. The troops were provided with *zulameikas* and *kibitkas*, long sheep-skin coats, wadded jackets, bedding felts, woollen foot-cloths, wide boots, felt shoes, and linen and uniform of the 1st issue. Their tools comprised 62 shovels, 83 axes, 23 hoes and pickaxes, 78 *ketmens* and 4 crow-bars.

The means for carrying water were for the most part taken from the Sári-Kámish Force, or were furnished by the Khivan authorities, and consisted of 231 water-barrels and 484 water-skins *burduks*, of a gross capacity of 8,910 gallons. From the wells of Chágil, where the force was finally equipped for the march, there were taken provisions for 30 days, tea and sugar for 4 months, and barley for 21 days. Slaughter cattle (oxen and sheep) were driven with the troops. A large quantity of vinegar and dry cabbages were also taken. The transport of the force consisted of 900 camels with 153 drivers, the former being hired in the Shurakhána District at the rate of 25 *roubles* per camel *per mensem*,§ the drivers receiving a pay of 4½ *roubles* a month and free rations. To feed the camels on long marches sesame cakes were taken.

Colonel Kuropátkin chose the more difficult route, the one which had been reconnoitred by General Skobelev, when he was Lieutenant-Colonel of the General Staff in 1873, *viz.*, the route from Zmukshir to Ortakui. General Skobelev's reconnaissance, which extended over 466 miles and was completed in eight days, had been carried out under great difficulties caused by the danger of attacks from the Turkumáns, the great heat, the dryness of the air, the depth of the sand, and the scarcity and bad quality of the water. The details collected by General Skobelev were very circumstantial, and gave a perfectly correct idea of the locality and its resources, and were accompanied by a sufficiently correct eye sketch.

The route traversed by General Skobelev between Zmukshir and Nafas-Kuli was about 193½ miles long. From his description it was evident that there was very little water upon it, and its difficulties for a body of men with horses and camels of any considerable size were great, especially in the dry season. Between the above-mentioned points were the wells of Chágil, Kizil-Chakir, Nafas-Kuli, and Yakej, all with very little water and with two waterless stretches of 52 and 100½ miles. If it were assumed that on these waterless stages the troops could march 20 miles in the 24 hours, it was evident that for the march from Kizil-Chakir to Nafas-Kuli they would have to be provided with water for five days; but as in the hot weather water evaporates rapidly, even with such a supply the column might find itself in a dangerous position.||

Colonel Kuropátkin's force left Petro-Alexandrovska on the 12th (24th) November, and marching by the Gurlán ferry, Tash-Hauz, and Zmukshir, reached the wells of Chágil on the 17th (29th). Here it found 1½ *sotnias* of Cossacks from the Sári-Kámish Force, and it was joined by the Rifle Company

* 3rd Company of the 5th and 1st and Rifle Companies of the 13th Turkistán Line Battalion, 1st *Sotnia* of the 1st Orenburg, and 5th of the 2nd Ural Cossacks.—*Author*.

† Of the 4th Battery 1st Turkistán Artillery Brigade.—*Author*.

‡ From the 1st Orenburg Cossacks.—*Author*.

§ For these camels the Government paid 29,376 *roubles* (Kuropátkin's Report, No. 529, dated 13th (25th) February 1881).—*Author*.

|| There is a description of this route in the Proceedings of the Caucasus Section of the Imperial Russian Geographical Society, Vol. II, No. 4.—*Author*.

of the 13th Turkistán Line Battalion which had been detailed for the column. On the following day, after untold difficulties and privations, Cornet Stetsenko, who had been sent, as mentioned above, by the Commander of the Expedition to reconnoitre the road, arrived at Chágil. He, with four guides and 8 horses, carrying water and as many supplies as they could take, had left Kizil-Arvat on the 4th (16th) November, and, marching by the dried-up wells of Arshikui and Puran, had on the 5th (17th) reached the wells of Kizil-Takir. In two wells the water was very dirty and brackish, and in the third, where the water was less brackish, about 8 gallons of liquid mud was found. The horses were, therefore, given each 2·7 gallons of the supply which had been brought, and then hardly more than 2·7 gallons remained for the men. On the same day, late in the evening, Stetsenko arrived at the Uzboi, and on the 6th (18th), after leading the horses on foot and throwing away the barley and meat, the wells of Upper Igdi were reached. After watering the horses, he marched 10 miles up the Uzboi and halted for the night. On the 7th (19th) November, on coming to the wells of Akjaili, 26½ miles from Igdi, they were found to be dried up, and the march up the Uzboi had to be continued on foot as the horses refused to be ridden further. After marching till 11 p.m., driving the horses before him and halting at times for repose, on the advice of the guides Stetsenko turned in the direction of Sári-Kámish. After three hours' marching, however, the guides declared they had lost their way, but still marching in a north-easterly direction, on the morning of the 8th (20th) Stetsenko arrived at wells, of which one was dry, but the other had fresh water. After resting here till 2 p.m., he marched in a northerly direction, and at 5 a.m. on the 9th (21st) November came unexpectedly upon the 3rd company of the 13th Turkistán Line Battalion belonging to the Sári-Kámish force, which had been stationed to watch the road between Charishli and Ortakui. Here he learnt that he was not on the road to Sári-Kámish, and that the wells which he had just left were called Ortakui. The Commander of the company provided Stetsenko and his companions with all they required, and pointed out the way to Chárishli, where General Glukhovski was.

On arriving at these wells, and learning that Colonel Kuropátkin was soon to arrive at Petro-Alexandrovsk, Stetsenko marched on the 10th (22nd) and reached the wells of Chágil on the 18th (30th) November. For this daring ride Stetsenko received the Cross of St. George of the 4th Class, and the Kirghiz *jigits*, who accompanied him, were awarded the Military Order of the 4th Class* and large money rewards.

The Turkistán column remained halted at Chágil, and then at the fresh-water lake of Kizil-Chagilda, 4½ miles from Chágil, to which it was moved, on account of the insufficiency of water at the latter place, till the 20th November (2nd December) inclusive, employing the time in making final preparations for the march across the desert.

According to Colonel Kuropátkin's calculations, the following amount of water was required for a day on the march in cold weather :—

- (1) For 900 men at 1·35 gallons *per diem*, 1,215 gallons, and for 400 horses at 5·4 gallons, 2,160 gallons—in all 3,375 gallons.
- (2) For a day's halt when the camels were watered, for 900 men, 2,430 gallons, for 400 horses at 8·1 gallons, 3,240 gallons, and for 900 camels at 13·5 gallons, 12,150 gallons—total 17,920 gallons.

The smallest quantity of water which would suffice for the troops for several days at a time in the cold weather without cooking and only with great

* General Order, Trans-Caspian Field Force, No. 548, dated 20th December 1880 (1st January 1881).—*Author*.

privations for the horses was, 7 gallon per man and 2.7 gallons per horse *per diem*, making a total of $607.5 + 1,080 = 1,687.5$ gallons. Of all the wells on the route from Zmukshir to Bámi, there were only two groups which could supply even the small quantity of water required by the Turkistán column, and these were Ortakui and Igdi. They had plenty of water, and, what was of more importance, the water in them lay so near the surface that in a few hours the troops could dig others if those existing were found to be dry or filled up.*

In marching by the Ortakui road, water would have to be taken from the Khánate of Khiva to last to Ortakui, from that place to last to Igdi, and from there till Kizil-Arvat or Bámi was reached, *i.e.*, to the Akhál-Tekke *oasis*. If there were no rain, the camels even of a small force could only be watered twice on the whole road from the Khánate to the Tekke *oasis*, *viz.*, at Ortakui and Igdi. All intermediate wells might be of some use to small caravans, even though their water was not quite good, but for the march of so small a force as the Turkistán column, they were of quite secondary importance. Not one of the wells dug by the Sári-Kámish force was well supplied with water. That at Giaur-Kala, which was 84 feet deep, gave only 405 gallons in 24 hours. The well at Sháh-Senem gave 169 gallons of brackish water at the same time. At Kiziljá-Kuyúsi the wells, which were of considerable depth, filled up quickly as the soil was very soft, and the water in them was only sufficient for 2 companies, or for a *sotnia* with a small quantity of baggage. This place lies off the direct road from Giaur-Kala by Sháh-Senem to Iliáli. Finally, at 4 miles from the wells of Chágil lies the freshwater lake of Kizil-Chagilda, where the Turkistán column halted and filled up its water-supply, which was to last till Ortakui was reached.

On the return march of the Turkistán column in the end of February and in March, all the wells dug by the Sári-Kámish Force were found to be filled up, only that at Giaur-Kala being of any use.†

For some days before the arrival of the Turkistán column at Chágil, troops from the Sári-Kámish Force had occupied the wells of Chágil, Kiziljá-Kuyúsi, and Giaur, *i.e.*, for a distance of $66\frac{2}{3}$ miles on the route to be traversed by the column, but by the time the column arrived at the wells at Giaur they had been abandoned, for there was a danger that the Turkumáns would destroy them.

On the 21st and 22nd November (3rd and 4th December) the Turkistán column started on its march from Kizil-Chagilda in two *échelons*—the two *sotnias* and the rockets in the first, the 3 companies and the 2 guns in the second. This division of the force was made on account of the small quantity of water in the wells of Sháh-Senem and Giaur-Kala, and also because at the wells of Kiziljá-Kuyúsi, past which the route ran, there was good water in only one well which would not suffice for the whole force, and there was a risk that the water brought from Kizil-Chagilda might have to be resorted to, which was dangerous, as there was no saying what difficulties might await the force.

On the 24th and 25th November (6th and 7th December) the *échelons* arrived at Giaur-Kala. On the road, thanks to the rain which had fallen on the 20th (2nd December), there was water in the *takirs*,‡ which sufficed not only for the horses, but also for the camels. The wells dug by the Sári-Kámish force at Kiziljá-Kuyúsi, Sháh-Senem, and Giaur-Kala also facilitated the march of the column, although the rain water and the supply brought by the

* The copious Charishli wells are of no practical use to troops, as they are 105 feet deep, are very scattered, and require much time to clean them out.—*Author*.

† Note by Colonel Kuropátkin on the successful operations of the Expedition sanctioned by the Emperor and sent to explore the old bed of the Amu-Daria.—*Author*.

‡ These are level spaces among the sand-hills with hard clayey bottoms through which rain water soaks only on the third or fourth day after it has fallen. The water in them is usually muddy, but not unpleasant to the taste.—*Author*.

troops rendered them almost unnecessary, and the water at Sháh-Senem was not used on account of its bad quality. At Giaur-Kala was found a detachment of Cossacks of the Sári-Kámish force who had been sent there shortly before Colonel Kuropátkin's advance from Kizil-Chagilda to protect the well from the Tekkes. There was but a small quantity of water in the wells, but a large amount of rain water in a pit which had been dug to contain it. On the arrival of the column the Cossacks returned to Kiziljá-Kuyúsi. At Giaur-Kala all the skins and barrels were filled up to prepare for the waterless march to Ortakui. Half of the skins were found to be unserviceable, and of the barrels only 75 per cent. could carry water; so the cavalry *échelon* only took with it 2,789·1 gallons, and the infantry 3,430·5 gallons of water from Giaur-Kala.

The first *échelon* marched early on the 25th November (7th December). At 6 P.M. it made a halt for four hours, and at 10 P.M. again started and marched till 6 A.M. next morning, its baggage only coming in at 9 A.M., and not all even then. The total length of the march had been $39\frac{1}{2}$ miles. The road from Giaur-Kala to the ascent of the hills of Zangi was over sand, and beyond that the soil was stony, except between the 18th and 24th miles. The night was extremely dark, and to prevent the baggage from going astray picquets of Cossacks had to be left every half hour to keep up fires.

On the 26th November (8th December) the *échelon* advanced at 3 P.M., and at 12 miles from the last camp passed the two wells of Daudir which had been opened by a party of Cossacks under Colonel Kovalevski sent to Ortakui a day before the Turkistán column started. In one of these the water was slightly brackish, but fit for cooking, and in the other quite salt, though the horses drank it. The *sobnius* watered their horses at these wells, but the baggage passed on. Up to the wells of Daudir the soil was stony and sandy, but at a distance of $6\frac{3}{4}$ miles beyond them the sand rises to a ridge much higher than the surrounding country. At 11·30 P.M. the *échelon*, after a march of 24 miles, halted for the night, and on the next day, after a march of $23\frac{1}{2}$ miles across the sands, past the well of Nafas-Kuli,* which had very little water, and which only horses could drink, the *sobnius* arrived at Ortakui. Here there were two wells, one of which had not yet been fully repaired by the Cossacks of the Sári-Kámish force who had been sent from Chágil by General Glukhovski to clean out the wells. However, there was no necessity for such a detachment being sent, for the water was so near the surface that not only the cleaning of the old wells, but even the digging of new ones offered no difficulties. On their arrival at Ortakui, the Turkistán troops dug and cleaned out eight old wells, besides the two mentioned above. The water in the wells sufficed for the men and horses of both *échelons* as well as for the camels, and to fill up for the next stages. The camels, after four days without water, drank on an average 16·2 gallons each. On the 28th November (10th December) the infantry *échelon* arrived at Ortakui, while the cavalry remained halted on the 28th and 29th (10th and 11th December). On the 30th (12th December) the whole force advanced, carrying with it 6,628·5 gallons of water for the waterless stretch of 68 miles of desert to the middle wells of Igdi. On the first day 27, on the second $29\frac{1}{2}$, and on the third day, 2nd (14th) December, $11\frac{1}{2}$ miles were traversed. The road almost the whole way lay across sands with a few patches of hard soil, and crossed the Uzboi several times. At one side of the road were the wells of Bála-Ishem,† and at 2 miles from Middle Igdi the wells of Upper Igdi, one of which was open and five dry and filled up. In the

* Between the 14th and 15th mile on the third march the road to the wells of Yakej, which lie on the same level as the wells of Daudir, branches off.—*Author*.

† *Jigits* sent to Bála-Ishem reported that of the ten wells eight were filled up, and that though there was water in the remaining two, it was only good in one of them.—*Author*.

former the wafer was fit for drinking. The march to Igdi was made more easily than was thought possible, as the weather was good all the time, and on arriving at Igdi the force had still 2,006·1 gallons of water.

On the 1st (13th) December, Colonel Kuropátkin, hearing from the *jigits* sent by him to Igdi that only two of the wells there were open, and that round about them there were tolerably fresh traces of a large number of camels and horses, had sent 40 Cossacks with intrenching tools thither to seize the open wells and commence clearing out the others. On the arrival of the troops the men were at once set to work to clear out the wells, and by dawn on the 3rd (15th) December nine wells were available. Besides, about one-third of the camels were sent $1\frac{1}{2}$ miles off to Upper Igdi, where three wells had been cleared out. In one of these the water was fresh and in the two others slightly brackish, but still good for horses and camels. The fitness of the wells of Upper Igdi was confirmed by traces of the camp of Colonel Markozoff, who had traversed this route in 1873, being found near them. He, however, had only got to within a few miles of Ortakui, and had then been forced to return to Krásnovodsk after suffering great privations. The traces found were Russian graves, splinters of wheel-spokes, staves of barrels, old boots, buttons, bullets, and other small things.

For his onward march, Colonel Kuropátkin did not choose the road to Kizil-Arvat as had been proposed, but the direct route to Bámi, as, according to the guides, the road from Igdi to Kizil-Arvat was much longer than the distance shewn on the maps. After a halt on the 3rd (15th) December, on the 4th (16th) the column left Igdi and marched $32\frac{3}{4}$ miles that day, halting at a place where there was no water at night. Next day the camp was pitched at the wells of Sansiz, $10\frac{3}{4}$ miles from the last halt. Here there are 20 wells, of which only six contained water, one of them being slightly brackish, but drinkable in case of necessity; the other five quite bitter and injurious to health.

On the 6th (18th) December the column halted at a place without water, called Daulat-Tapiz, after a march of $30\frac{3}{4}$ miles from Sansiz; on the 7th (19th) reached the dry wells of Niáz, and on the 8th (20th) December arrived at Bámi.

The marches from Igdi were the most difficult of any on the whole route of 448 $\frac{3}{4}$ miles from Petro-Alexandrovsk to Bámi. The whole of the last 108 miles, except the last $16\frac{3}{4}$ into Bámi, were through a succession of very high sand hills difficult to traverse even in winter, and in this tract the force found water only at the wells of Sansiz, for the wells of Niáz had been filled up in September by order of General Skobelev in order to hinder the enemy's advance against the Micháelovsk line.

In view of the difficulties of the road, Colonel Kuropátkin had sent *jigits* forward to request that a small party might be ordered out to meet him and to clear out the wells of Niáz before his arrival, or, if the opening of these wells was considered inadvisable by the local authorities, he asked that water might be sent out. About 2 miles after passing the wells of Niáz, the Turkistán column met a convoy with water which had been sent out from Bámi under escort of a company of the Apsheron Regiment. The total quantity was only 810 gallons, and so Colonel Kuropátkin turned back to the place where he had proposed to halt for the night, at $13\frac{1}{2}$ miles from Bámi, and served out the water to the *sotnia*. The infantry had brought with them to the last camp 10,269 gallons, which would have sufficed them for two days longer, i.e., for a waterless march of in all $166\frac{3}{4}$ miles from Igdi.

At no point on the line of march had the enemy been met with. In the last part, from Igdi to Bámi, the appearance of the force was quite unexpected by the Turkumáns, who hastened to retire before it, leaving their felts,

household utensils, and even 20 camels which had been captured by our troops.

The total length of the march from Petro-Alexandrovsk to Bámi was 448½ miles (673 *vershs*). The part between Chágil, where the force was finally equipped, and Bámi, a stretch of 338½ miles of desert, was traversed in 18 days, giving an average for 14 marching days of 24 miles a day. Between Giaur-Kala and Bámi the camels were only watered twice.

The column had received 900 camels at Petro-Alexandrovsk and had also taken 900 with it from Chágil, as casualties had been made good from the animals of the Sári-Kámish Force. On the 9th (21st) December there were 835 camels available at Bámi: out of these, 17 were quite unfit for duty through weakness. Of the remainder some had died, and others had been abandoned on the road, or had been stolen by their drivers.* The state of health of the troops was excellent, and on the arrival of the column at Bámi it had only one man sick and 9 "weak men." The weather was favourable throughout, the mean temperature having been at 7 A.M. 31·75° F., at 1 P.M. 35·5° F., and at 7 P.M. 33° F., making the mean temperature throughout 33·4° F. There were 5 windy, 1 rainy, and 6 dull days.

On the 9th (21st) and 10th (22nd) December the column halted at Bámi, and received provisions for three weeks, forage for a month, and the necessary boots, tobacco, &c. In order to diminish the baggage, the water-carrying utensils and the spare kits of officers and men were given into store.

Thus the train of the force was reduced from 818 to 612 camels, 206 being left at Bámi, and the infantry were to march the rest of the way on foot. Leaving Bámi on the 11th (23rd) December, on the 15th (27th) the Turkistán column arrived at Sámurskoye.†

On inspecting the column on the day of its arrival at the latter place, the Commander of the Expedition found that all the troops, in spite of the hardships they had gone through, had a splendid appearance and were in first rate order. General Skobelev telegraphed to the Commander of the Troops in the Turkistán Circle:—"It is a long time since I have seen the Turkistán troops, and I am glad to see the same order, neatness, and splendid military discipline on which the troops of that circle have always rightly prided themselves."‡

The camels left behind by Colonel Kuropátkin were found to be quite unfit for work, and therefore General Petrusévitch sent them and the 49 drivers left with them to their homes, giving them ten days' provisions and permission to take any road they chose.§ The men left in two parties, and were plundered by the Tekkes on the third march out of Bámi, and also at the wells of Ortakui. Only 27 men with 12 camels arrived at their homes, the remainder having been either killed or made prisoners by the Tekkes. On this subject General Kaufmann wrote to St. Petersburg that the powerful impression on the minds of all produced by the fights before Gok-Tapa would nullify the unfavourable impression produced by the tales of the camel-drivers of their sufferings from the Tekkes, especially if we succeeded in finally subduing the Akhál-Tekke oasis.||

* Within the limits of the Khánate of Khiva 118 camels were lost in this way, but these were made good at the wells of Chágil.—*Author*.

† The Turkistán column in the Akhál-Tekke Expedition, 1880, in the *Voyennyi Sbornik*, No. 3 of 1882; Report from Colonel Kuropátkin to the Temporary Commander of the Troops, No. 129, dated 19th (31st) December; and also Report from Giaur-Kala, No. 62, dated 24th November (6th December) 1880.—*Author*.

‡ Telegram No. 5841, dated 15th (27th) December.—*Author*.

§ Report from General Petrusévitch to General Skobelev, No. 389, dated 13th (25th) December 1880.—*Author*.

|| Report from General Kaufmann to the War Minister, No. 1353, dated 20th February (4th March) 1881.—*Author*.

CHAPTER XIV.

Advance of the cavalry column from Duz-Olum up the Chandir—Decision of the Commander of the Expedition with regard to the occupation of Yegyán-Bátir-Kala—Advance of the main body from Bámi—Occupation of Kalát and Yegyán-Bátir-Kala—Establishment of a fresh base in the Akhál Oasis—Measures taken after the occupation of Yegyán-Bátir-Kala—State of affairs with the enemy—Reconnaissances of Gok-Tapa on the 4th (16th), 11th (23rd), and 12th (24th) December—Transport of supplies and concentration of troops at Yegyán-Bátir-Kala—Reconnaissance on the 18th (30th) December—Storming of Yangi-Kala on the 20th December 1880 (1st January 1881)—Arrangement of the camp before Dangil-Tapa—Reconnaissance of Dangil-Tapa on the 21st December 1880 (2nd January 1881).

By the 17th (29th) November all the cavalry detailed for the flanking column to march up the Chandir (2nd and 5th *sotnias* of Taman, and 1st and 2nd *sotnias* of Poltáva Cossacks, one division of the 15th (Tver) Dragoons, and Horse-Mountain Division) were concentrated at Duz-Olum.

As he desired to collect as much information as possible about the valley of the Chandir and the neighbouring localities, which were quite unknown to us, the Commander of the Expedition had ordered three topographical officers, Safonoff, Glamazdin, and Pepelyaëff, who were in the district, up to Duz-Olum, and gave them a small escort of infantry and Cossacks, and on the same date directions to make a survey of the nearest portions of the Chandir valley. By the 16th (28th) November this work was finished, but, in order to reconnoitre the country thoroughly on both banks of the Chandir with a view to the advance of the cavalry column, the 2nd and 5th *sotnias* of Taman Cossacks, under *Voiskovóï-Starshina* Tkacheff, marched from Duz-Olum to Yárti-Kala, 37½ miles distant. The *sotnias* were provided with supplies and oats for seven days and 120 cartridges per man, provisions for four days and 60 rounds being carried by the men, and the remainder on 140 horses of the pack transport corps. In addition supplies for the men and horses of the transport corps for four days and entrenching tools for the repair of the roads were taken. With the column also marched the topographers, an officer of Sappers, and Colonel Artsishevski.

Colonel Artsishevski's orders were to take the *sotnias* up to Yárti-Kala, station them there, and thence reconnoitre the valley of the Chandir with a view to ascertain whether it would be used as a place for hay-making and for pasturing horses; and he was also to repair the road to Duz-Olum. On completing this service, he was to return to Duz-Olum with his transport. The topographers were to map the country on all sides of Yárti-Kala, one of them having to work to the south-west as far as the ridge of the Sagun-Dágh, and thence back to Duz-Olum; another was to work to the north-west towards the Jimánli ravine, which runs down to Társakan; and a third was to remain at Yárti-Kala and map the whole country for 13 or 14 miles round.*

On the 18th (30th) November, when the pack transport returned to Duz-Olum, the Commander of the Expedition gave the following orders:—

- (1) The two *sotnias* of Poltáva Cossacks, with two heliographs under Lieutenant-Colonel Prince Golitsin, with four days' supplies and forage,

* General Order, Trans-Caspian Field Force, No. 476, dated 15th (27th) November 1880.—*Author.*

- 120 rounds of ammunition per man, *tentes d'abri*, and Linnemann spades, are to leave Duz-Olum on the 19th November (1st December) for Társakan. There they are to receive one day's supplies and forage so as to advance with four days' supply of both on Yárti-Kala.
- (2) The division of Dragoons, the Horse Mountain Division, one heliograph, and the pack transport under Colonel Prince Eristoff are to march on the 21st November (3rd December) up the Chandir to Yárti-Kala. The Dragoons and the Horse-Mountain Division are to carry supplies for themselves and their horses for four days, 120 rounds ammunition per man, *tentes d'abri*, and Linnemann spades. The pack transport will carry biscuits and preserved meat for 700 men for six days, and oats for the same period for 700 horses.
 - (3) Each *sotnia* of the Poltáva Cossacks and each squadron will take with it ten signal rockets and its sickles and scythes.
 - (4) All cavalry marching for the Chandir will take two rations of corn-brandy for the entire route.
 - (5) Sub-Lieutenant Voropánoff's detachment of volunteers will march on the 24th November (6th December) for the Nukhur Pass, and will join the cavalry advancing from the Chandir at Nukhur. It will march in light order, and take with it 120 rounds of ammunition per man, fur-coats, warm foot-cloths, biscuits for five days, and some signal rockets to inform the cavalry of its whereabouts.
 - (6) The remaining cavalry, except those *sotnias* which are detailed for the lines of communication, will be concentrated at Bámi under Colonel Artsishevski.
 - (7) All troops, on being concentrated at Bámi, will make their final preparations for taking the field, and commanding officers will once more inspect all the equipment, and must remember that in war nothing is too trifling.
 - (8) General Petrúsevitch will take command of all troops at Bámi.
 - (9) All field administrations, &c., will be moved up to Bámi.*

With Prince Eristoff's column marched the Commander of the Expedition, who ordered that, in addition to the pack transport, it was to take 50 camels under escort of half a company of the Crimean Regiment.

During the first march of Eristoff's column on the 21st November (3rd December) to Mamajusli, it was remarked that the small horses of the Horse Mountain Artillery could not keep up with those of the Dragoons at a walk, but had continually to trot. Eristoff's orders for the 22nd November (4th December) were to march with the troops to Yárti-Kala, but to have the camels at the camping ground to feed till mid-day, when they were also to move off towards Yárti-Kala and halt at nightfall. The route followed by the cavalry up the Chandir from Duz-Olum to Yárti-Kala was traversed without difficulty, thanks to the repairs which had previously been made. The valley of the Chandir had once been populous and well cultivated, but was now ruined and desolate. Fruit trees and woods were met with tolerable frequency, and all along the route followed by the column, in spite of the late season of the year, there was abundance of forage for the horses. On the 23rd November (5th December) the whole cavalry concentrated at Yárti-Kala had a day's rest, and General Skobelev personally took command.†

* General Orders, Trans-Caspian Field Force, Nos. 498 and 504, dated 18th (30th) November and 19th November (1st December) 1880.—*Author*.

† General Order, Trans-Caspian Field Force, No. 511, dated 22nd November (4th December) 1880.—*Author*.

From Yárti-Kala General Skobelev sent the following telegram to the Chief of the Staff of the Army of the Caucasus :—" You know that the advance has begun. I think it my duty now, when on the verge of success, or, as may happen in war, of possible failure, to express my gratitude for the many-sided assistance afforded me, and the heartiness with which all branches of the administration of the Army of the Caucasus have supported me. I wish to assure you how much I feel that this assistance has enabled me to undertake twice as much personal responsibility in all matters than I otherwise would have assumed. I hope you will also convey the contents of this telegram to General Sofiano and to Dr. Remmert, who have done so much to help me."*

In consequence of the knowledge gained by the reconnaissances made in the valley of the Chandir, General Skobelev resolved to cross the Kopet-Dágh, not at the Karagán stream, as had formerly been proposed, but at Kalát, and to adopt the following route :—

			Miles.
24th November (6th December)—Chandir	...	...	16 ¹ / ₂
25th November (7th December)—Kesri	...	...	23 ¹ / ₂
26th November (8th December)—Kuliyár-Muhammad	...	...	23 ¹ / ₂
27th November (9th December)—Danár	...	...	23 ¹ / ₂
28th November (10th December)—Kalát	...	...	23 ¹ / ₂

He, therefore, requested General Petrúsevitch to send by the 28th November (10th December) to Kalát from Bámi an advanced guard consisting of a mobilized battalion, a battery, a strong *sotnia* of Orenburg Cossacks, and a detachment of volunteers, with supplies enough to last from 12 to 15 days, both for this force and the cavalry column,† which were to be carried by the waggons of the wheeled transport corps, so as not to delay the march of the advanced guard. If possible, a few one-horse waggons for the conveyance of the wounded were to be sent with this advanced guard. The infantry and cavalry were to have 120 rounds per man, the artillery one complement of ammunition, and all troops their full camp equipage. If the cavalry had not reached Kalát by the 28th November (10th December), the advanced guard was to entrench itself there, for which purpose an extra proportion of entrenching tools was to be issued to the troops from the Engineer Park at Bámi, the Linnemaun spades being left behind, and the volunteers were to be sent with all precautions to meet the cavalry. If the junction were successfully effected at Kalát, General Skobelev resolved to advance to Yegyán-Bátir-Kala, occupy it, entrench himself there, and await the arrival from Bámi of two months' rations for 7,000 men, forage, and various military stores.

The Commander of the Expedition, therefore, ordered General Petrúsevitch to advance with the main body from Bámi straight on Yegyán-Bátir-Kala with two months' supplies for 7,000, and, if possible, for 8,000 men, the artillery and engineer parks, the field medicine reserve, and the field hospital. In his advance, he was to leave garrisons behind at Archmán (1 company and 2 guns), Karagán (1 company and 2 guns), and Kalát (3 companies and 2 guns); and all these points were to be at once fortified, and provided with supplies for two months, one complement of artillery ammunition, and 120 rounds per rifle.

General Skobelev's resolution to seize Yegyán-Bátir-Kala did not in the least affect the general plan of operations, for Karagán (Opornoye) was less fitted for an advanced base than Kalát, and Kalát than Yegyán-Bátir-Kala.

"If you can join me at Kalát with the infantry advanced guard," he wrote to General Petrúsevitch, "I think I shall occupy Yegyán-Bátir-Kala; but

* Telegram No. 2154 sent from Kalát on the 29th November (11th December) 1880.—*Author*.

† This column numbered 803 men and 923 horses.—*Author*.

if the enemy makes a strenuous resistance, I shall not persist in this, but avoiding serious losses, shall retire on you. Such a retreat would have its advantages, as it does not affect our arrangements, nor touch the essence of our plan of operations, and will certainly lead the enemy into error as regards our intentions.

The more I think of it, the more I see the necessity of holding fast to our system of advancing from one fortified point to another, and any haste would be ill-advised, for I do not wish to see the advanced force compelled to retire in the event of insufficiency of supplies, or of the attack of overwhelming forces of the enemy. It must be evident to Your Excellency* that the most risky period of the movement undertaken by me is the passage over the Kopet-Dágh; and if the infantry of the advanced guard could only occupy Kalat, its presence alone would greatly lessen the danger. It must, therefore, be risked even if the chances are unfavourable to us, for in war one must not be guided too much by considerations of possible loss, as such will never save a strategically wrong movement like mine from failure if the enemy is enterprising. The calculations for such a junction of two forces beyond a range of hills, at a point at which they may be anticipated by the enemy, must always be based on considerations of the character of that enemy, and not only on those of a purely strategical nature. Military history teems with examples of this. Always take into consideration the moral element (Hohenlindin in 1800, 1813, 1814, and the reverse in 1757 and 1866), and it will be so now!

You must know that to advance without having a sufficient quantity of supplies available or arrangements made for bringing them up is only to get ourselves laughed at, and therefore in case of any reverse it would be better to put off everything till the spring season than to risk anything by undue haste, especially if one considers the present difficult financial position of our country and the sacrifices it has made.

"Between the 5th (17th) and 10th (22nd) December the bombardment of Gok-Tapa should be going on, and my junction at Kalat with the advanced guard of the infantry should take place on the 23th November (10th December) 1880. Nur-Geldi-Khán† has assured me that the Tekkes will defend the pass. Forward then! Now is the time for decisive action!"‡

As on the march of the pack horse transport corps to Yárti-Kala the Commander of the Expedition had remarked that many of its men were ill, very much exhausted, and that the corps generally was in bad order and could not march further, he ordered it to be sent by Band-Hassan to Bámi, where the men were to be replaced by others. The camel transport, which arrived at Yárti-Kala at mid-day on the 23rd November (5th December), was sent back next day to Duz-Olum; and the cavalry carried with them four days' supplies for men and horses, which were ordered to be made to last for seven days, counting from the 24th November (6th December). On that day the cavalry column marched at 6 A. M. up the Chandir for the springs of Ján-Bulák. In the advanced guard was one *sotnia*; at an hour's distance behind it the main body (4 *sotnias* and 2 guns), and in the rear guard one *sotnia*, with the baggage. The advanced guard was commanded by Captain Nedománski of the General Staff, who was ordered, on arriving at Ján-Bulák, to place sentries over the

* A style of address to which General Petrúsevitch's rank entitled him, but not as understood by the English value of the words. An English General in command would not, of course, thus address any of his subordinates.—*Rev.*

† A Goklan Elder of Kári-Kala and contractor for hay.—*Author.*

‡ Letter from General Skobelev to General Petrúsevitch, No. 2152, dated 23rd November (5th December) 1880.—*Author.*

springs with orders that only water for the men to drink and for cooking was to be taken from them, while the horses were to be watered at a point $5\frac{1}{2}$ miles from the camping ground, where the road approached the river Chandir, as there would be no means of watering them at the end of the march. The *sotnia* of the advanced guard had a large number of tools with it for repairing the road, and with it marched also the officer of Engineers.

The road for the first $5\frac{1}{2}$ miles runs along the narrow valley of the Chandir, over rocky ground, and then leaving it ascends the pass between the basins of the Chandir and Sumbár. Up to this point the road was tolerably good, but on the pass the advanced guard had to repair it a good deal, especially where the ground is stony. The passage was excessively difficult for the Horse Mountain Division, so that all the rounds had to be taken out of the boxes and carried on horses. Notwithstanding this, the mountain guns were only moved very slowly, and mostly only by the aid of the Dragoons. Thus the march was much delayed, and camp was only reached at 8 p.m., when it was quite dark. Piles of wood had, therefore, to be lit to show the way. The springs of Ján-Bulák had very little water in them, and that only sufficed for the men. The length of the march turned out to be $23\frac{1}{2}$ miles.

On the 25th November (7th December) the column finished its march to the ruins of the village of Kesri (on the Sumbár) in the same order as on the previous day. The road for $14\frac{3}{4}$ miles lies over rocky ground with ravines, but it presents no serious obstacles to the movement of troops. The main body, which left Ján-Bulák at 11 a.m., reached camp at 6 p.m. As the villages of Kulyár-Mashad and Daniár, which lie on the road to the Kalát Pass, appeared from the reports to be inhabited by Persians, the Commander of the Expedition resolved to advance on the *oasis* by the Arváz Pass so as to avoid diplomatic protests from the Persians, especially as in case of a fight with the Tekkes the villages might suffer.

The advanced guard marched at 8 a.m. on the 26th November (8th December), the main body at 10 a.m. The road was in general good, and required repairs only in a few places. It first runs along the valley of the Kesri (the highest level of the course of the Sumbár), and then crosses to that of the Daine stream, a tributary of the Sumbár, to the springs of Daine. The length of the march is $18\frac{3}{4}$ miles, and the main body arrived in camp at 6 p.m. The springs of Daine are at the foot of the Arváz Pass (opposite Durun).

Next day the column had to cross the Kopet-Dágh range and enter the Akhál-Tekke *oasis*. According to the reports of the scouts, the Tekkes had heard of the advance of the cavalry, and had determined to make a night attack on it and to defend the Arváz Pass. The Commander of the Expedition, therefore, gave the following orders for the 27th November (9th December):—

- “(1) The advanced guard, consisting of the division (2 *sotnias*) of Poltáva Cossacks and the Horse Mountain Division under Colonel Navrotski, will advance at 6 a.m. under orders specially given by me.
- “(2) The main body (the divisions of Dragoons and of Taman Cossacks) will be under my personal command, and will march at 8 a.m.
- “(3) The pack animals will follow the main body, and will be under the orders of Colonel Prince Eristoff.
- “(4) In the event of a fight with the enemy, the advanced guard must act with the greatest energy, remembering that in Central Asia our safety is in close order, and it must manœuvre and keep up its communications with the main body.

- " (5) Colonel Prince Eristoff will be careful to replace all jaded artillery horses with Cossack pack horses, and I especially request him to take care that the artillery does not impede the force in its advance to-morrow into the Akhál-Tekke *Oasis*.
- " (6) In the event of a fight, a bandaging station will be established by the senior medical officer with the column.
- " (7) Commanding officers must take advantage of the ground to save their troops from losses which might be avoided. In such cases I recommend that the men be dismounted until called into the fighting line.
- " (8) All commanding officers will arrange, in concert with their medical officers, for the transport of the wounded on horseback. Everything connected with this important question is now left to the commanding officers and surgeons, so that there may be no anxiety on this score.
- " (9) I shall be at the head of the main body.
- " (10) All *jigits* are to be pushed forward in front of the advanced guard."

The advanced guard marched at 6 A.M. on the 27th November (29th December), and the main body at 8 o'clock the same day. After running for about $\frac{3}{4}$ mile along the valley of the Daine, the road began to rise to the main ridge of the Kopei-Dágh and became very difficult for guns, which continually stuck and kept back the *sotnia* following them, thus forcing the leading *sotnia* to frequently halt. Finally, movement on wheels became so difficult that the guns had to be put on the horses. On receiving the report of the difficulties of the artillery, the Commander of the Troops ordered it to be left behind under escort of a section, while the rest of the advanced guard continued its march.

About 12-30 P.M. the force entered the Arváz valley, and began to march along it; but, after proceeding for about 3 miles, the guides declared that no water would be found further on (this statement afterwards turned out to be untrue), and Colonel Navrotski therefore halted the advanced guard in the Arváz valley. Here the Dragoons soon arrived with the horse mountain guns, and after them the Taman Cossacks with the pack horses, and all the troops bivouacked. About 1-30 the Commander of the Expedition arrived at the bivouac, and here received a report from Voropánoff, the commander of the Volunteers, to the effect that, having heard from the Nukhurites of the successful march of the cavalry column to the Arváz Pass, he was marching through Nukhur to the *oasis*, and would await orders. He was at once ordered to hasten his march to Durun to unite with the cavalry column.

Having ordered the Poltáva *sotnias* in the advanced guard to be replaced by those of the Taman Cossacks, General Skobelev gave Colonel Navrotski a written order to occupy Kalát that night, and at 2 P.M. the advanced guard started, and about 3 P.M. entered the *oasis*, which was covered with a thick fog that did not permit of objects being distinguished at a distance of 200 paces.

After going a few miles, the guide told off for the advanced guard pointed out a fortress and declared that it was Kalát; but as the Kalát which was ordered to be occupied could not be so near the mouth of the pass, all the guides were assembled and closely questioned, and one of them, a Nukhurite, was chosen who promised to lead the force straight across-country to Kalát-Nur-Verdi-Khán, but not by the road to Durun, as the other guides desired. Near this same fort the division of Dragoons joined the advanced guard, and from this point the following report was sent to the Commander of the Troops at 4-35 P.M.:—"The

guide has brought us to a settlement which he assures us is that to which he was ordered to lead us; but as Kalát-Nur-Verdi-Khán lies further on, I am going to it. According to the guide, it is 26½ miles distant."

When the advanced guard resumed its march, the guide declared that three days before fires had been seen at night in the different *kishláks* roundabout, and that in them were flocks with cattle guards. As if to confirm his words, at 7 P.M., when the advanced guard reached the Karagán, a fire was seen in front, and the Nukhurite said that this was a fire kindled by Tekke cattle guards. To drive them off, Navrotski sent out the 1st half *sotnia* of the 2nd Taman *sotnia* under *Foisskoróí-Starshina* Tkacheff towards the fire, and submitted a report of the fact to the Commander of the Expedition.

On proceeding further, a tall white flame which at once disappeared was seen to the right of the advanced guard, and this could only be the signal given by a heliograph detachment with a Shpakovski lantern to indicate that the advance force from Bámi had occupied Karagán. The advanced guard, however, having received precise orders, could not move thither, and therefore continued its march on Kalát.

About 8-10 P.M. the *jigit* sent with Navrotski's second report returned, and stated that he had been unable to find the Commander of the Troops either in the Arváz valley or on the road followed by the advanced guard, and thus the touch between the latter and the main body was lost. As the division of Poltava Cossacks, with the horse mountain guns, had not come up with the advanced guard, it was supposed by the commander of the latter that General Skobelev had moved with them from the mouth of the pass along the hills towards Kalát while the advanced guard was making a détour: thanks to the stupidity of its guides. At the same time large bodies of armed Nukhurites joined Navrotski's force.

It was about 10 P.M. when the advanced guard approached the settlement of Káriz-Nur-Verdi-Khán, and the guide stated that a herd of cattle with cattle guards were passing the night inside the main fort. Colonel Navrotski therefore detailed the 2nd half of the 2nd Taman *sotnia* to capture the sheep, and followed it himself. While he was entering the village, the half *sotnia* seized the sheep which were in an enclosure and not in the fort; and as the guide declared that the cattle guards were in the fort, the 5th Taman *sotnia* was ordered to dismount and capture it. On knocking at the gate no answer was given, and the *sotnia* was ordered to break it in. It had, however, no large axes, and therefore a detachment of Dragoons with axes and crowbars was sent forward and the door was broken open; but behind it a second appeared, which the Dragoons also forced. At this time a Cossack was wounded and a Dragoon hurt by a shot through the key-hole, but finally the second door was broken open. The defenders of the fort retired to a tower in the interior, and were all cut down, only six women being taken alive.* The 1st half of the 2nd Taman *sotnia*, the division of Poltava Cossacks, and the Horse Mountain Division now came up, attracted by the firing, but without General Skobelev, of whose whereabouts nobody had any idea.

Fulfilling the orders of the Temporary Commander of the Troops, Colonel Navrotski at once continued his advance on Kalát, taking with him the women and the sheep, and arrived there at midnight. Here it appeared that the flocks with their guardians were in a detached fort to the north of Kalát. This was at once taken, and the defenders cut down by the 2nd and 5th Taman *sotnias* and the Dragoons; the sheep and prisoners taken at Káriz were shut up

* They were afterwards handed over to the Nukhurites.—*Author*.

in this fort along with those taken in it, and it was occupied by the 5th Tamar *sotnia*. In the two affairs we captured 6,000 sheep, 180 head horned cattle, 6 horses, 10 camels, 10 rifles, and 5 pistols. Fourteen Tekkes were killed and 16 taken prisoner. We lost one man wounded and one man contused. We expended 315 rounds of ammunition. The remainder of the cavalry bivouacked within the walls of Kalát at 2 A.M. on the 28th November (10th December).*

Supposing that the Commander of the Expedition had passed the night with the troops marching from Bámi to Durun, a report of the occupation of Kalát was sent thither at 7-15 A.M. In the morning, two half *sotnia* and some *jigits* were sent out to reconnoitre in the environs and in the course of the day they brought in about 5,000 sheep.

General Skobelev, who had been occupied with the Nukhurites who came to the pass, started on the road when darkness came on. With him were about 20 officers, Osetians, Cossacks, Kirghiz, and Nukhurites, but among them all were only seven rifles. When they entered the *oasis* it was quite dark, but at first they could trace the wheel tracks of the horse mountain guns. These, however, soon disappeared, and the Nukhurites pointed out the road, but soon lost their way, and landed the party at a small fort on the Karagán hill. Here General Skobelev caused trumpet calls to be blown, and a few voices were heard in the distance; so, thinking that these were the voices of the enemy, he ordered all the horses to be brought into the fort, and a halt to be made for the night. For two hours the trumpeter continued to blow, but no answer was given, and then General Skobelev sent out the Nukhurites to look for the troops, but not trusting them he still kept the trumpeter sounding, and afterwards resolved himself to leave the fort and look for the road. After wandering a little, a path was found on which were wheel tracks. Here the Commander of the Expedition decided to halt for the night at a small stream and wait for dawn. A Nukhurite was sent out with a promise of a great reward to look for Voropánoff and bring him up; and as dawn broke, the latter arrived at the bivouac, having marched the whole night from Nukhur.

On receiving at 9 A.M. on the 28th November (10th December) Navrotski's Report of the occupation of Kalát, General Skobelev sent *jigits* on the road to Bámi with orders for the commander of the advanced column coming from that place to hurry up to Kalát, and push forward a small infantry advanced guard to support the cavalry at Kalát. At 2 P.M. General Skobelev reached the same place with the volunteer detachment. The halt there had been utilized in putting parts of the village in a state of defence, the cavalry being bivouacked in close order among the enclosures. The Commander of the Expedition gave the following orders for the defence of Kalát:—

- "(1) Commanders are to be named for each face.
- "(2) The field of fire is to be cleared, timber cut down, and walls destroyed.
- "(3) The distances in front of the wall are to be measured in case of a sudden night attack.
- "(4) Places are to be chosen for detached posts (*sekreti*), and their line of retreat arranged for.
- "(5) In case of alarm all troops are to occupy their stations. I shall be in my position, and in case of a fight shall take command of all the troops. My position will be indicated by a lantern. The detachment of volunteers will form a general reserve. The troops will fire volleys only. A bandaging station will be formed under the orders of Colonel Prince Eristoff."

* C olonel Navrotski's Report, No. 8, dated 28th November (10th December) 1880.—*Author*.

At 8-30 A.M. on the 29th November (11th December), the advanced guard of the infantry arrived, and by evening the whole of Haidaroff's (the first) column had reached the place. In the desert numbers of cattle were observed moving towards Dangil-Tapa, but no enemy appeared on the 28th or 29th November (10th and 11th December).

General Petrúsevitch left Duz-Olum for Bámi on the 23rd November (5th December). The columns which he passed on the road were going along very slowly, as the heavy rain which had fallen on the 23rd, 24th, and 25th November (5th, 6th, and 7th December) had made the roads very heavy. Major Pagireff's column extended for 16½ miles from Márgis to Khwája-Kala. The commander of another column, Pojároff, reported that his camels were jaded, that he had to leave 78 loads at Társakan, and that his spare camels were perfectly useless; but received an answer that "energy and boldness should increase with difficulties and obstacles."* The camels, in slipping on the sand, became tired out, and some of the females gave birth to little ones. The Turkumán camel-drivers, taking advantage of the confusion, deserted and took their animals with them.

General Petrúsevitch arrived at Bámi on the 24th November (6th December). On the road from Khwája-Kala he sent orders to Kizil-Arvat to send the 3rd, 4th, and 5th Camel Transport Corps up to Bámi, so as to arrive there on the 25th, 26th, and 27th November (7th, 8th, and 9th December).

The halt at Kizil-Arvat had not improved the condition of the camels, but, on the contrary, a large number of them had become very feeble, and had to be left in the camel infirmary. There were in all fit for duty in No. 3 Train 600, in No. 4 1,310, and in No. 5 1,364 camels—total 3,274.

As the advance of the columns began, Gromoff brought up 1,000 camels from the Atrak line.

The men were equipped for a winter campaign in a manner that had never before been seen in war. Each had, besides his ordinary uniform, a fur-coat, a knitted waistcoat, foot-cloths, a spare pair of new boots, and a new piece of bedding felt. The troops were supplied with *yulameikas* in the proportion of one for every 11 men. In the infantry each soldier carried four days' supplies, 120 cartridges, and a Linnemann spade. Camels attached to the corps carried *yulameikas*, cooking utensils, the men's kits weighing 36 lbs. each, 120 cartridges per rifle, and four days' supplies; and thus on leaving Bámi each corps had 240 rounds per rifle and eight days' supplies. From the Engineer Park a few larger tools were issued to each corps for repairing roads and constructing fortifications, as the Linnemann spades were ill-adapted for such work, especially for road repairs.

General Petrúsevitch formed three columns and sent them forward on the 26th, 27th, and 28th November (8th, 9th, and 10th December) as follows:—The 1st, under Lieutenant-Colonel Haidaroff, consisted of 9 companies, 19 guns, and 2 *sotnias*† with ten days' supplies for 8,000 men, which were carried by the 3rd Camel Transport Corps along with part of the artillery stores‡ and of the Engineer Park (on 42 camels). The troops' baggage was carried on 400

* Telegram from General Petrúsevitch to Major Pojároff, No. 7960, dated 20th November (2nd December) 1880.—*Author*.

† 1st Battalion Sámur Regiment, with a hospital with 20 beds, 13th, 14th, and 15th companies Apsheron Regiment, Sapper Company, Krásnovodsk Company, half of 4th Battery 20th Brigade, the 3rd Mobile Battery (with horses from the 4th Battery 20th Brigade), the Naval Battery, a division of the 6th Battery 21st Brigade, the 1st and 6th *sotnias* Taman Cossacks, 2 heliograph stands, and a bandaging station of the Red Cross.—*Author*.

‡ One complement of ammunition per gun with the column, 102,000 rounds of infantry and 35,000 of cavalry ammunition, besides those with the troops (240 per rifle).—*Author*.

camels. The 2nd, under Lieutenant-Colonel Gogoberidze, was composed of 4 companies, 2 guns, and one *sotnia** with the 5th Camel Transport Corps, of which 350 camels were laden with artillery stores, 200 with the troops' baggage, and 500 with supplies. The 3rd, under Major Slovetski, had 4 companies, 6 guns, and 2 *sotnias*† with the 4th Camel Transport Corps, of which 250 camels carried artillery stores, and the remainder 480 cwt. of baggage, provisions, and oats. These moved by the following route :—

Columns.	26th Nov. (8th Dec.)	27th Nov. (9th Dec.)	28th Nov. (10th Dec.)	29th Nov. (11th Dec.)	30th Nov. (12th Dec.)	1st (13th) Dec.	2nd (14th) Dec.
1st ...	Burma (8 m.)	Archmán (16 m.)	Karagán (23 m.)	Kalát (14 m.)	...	...	...
2nd ...	...	Burma	Archmán	Karagán	Halt	Kalát	...
3rd ...	...	...	Burma	Archmán	Halt	Karagán	Kalát.

With the intention of forming a new line of communication, General Petrúsevitch ordered Gogoberidze and Slovetski to construct redoubts—the former at the Karagán stream, the latter at Archmán; and the latter was to leave in them garrisons of a company each with two guns and two months' supplies. With the two remaining companies Slovetski was to march to Kalát and form the garrison of this place. General Petrúsevitch himself left Bámi on the 28th November (10th December) with the 6th *sotnia* of the Lába Regiment, and gave over the command of the troops at Bámi to Colonel Verjbitski, ordering him to send forward a fourth column on the 1st (13th) December under Major Pagireff, consisting of the 3rd Battalion, Sámur Regiment, with a section of the wheeled transport and the Red Cross Hospital, which at General Petrúsevitch's request had been formed by Prince Shakhovski, as there was no Government *matériel* available for opening a field hospital with the advanced force.

When the Army of Operations advanced on Gok-Tapa, Bámi lost the military and strategical importance it had possessed for the past six months. The troops holding it had consisted of a small number of infantry with a large force of artillery under Colonel Verjbitski. "Their duty," said General Skobelev in his General Order, "was to hold the place and protect all that was left in it. Many times the garrison had to prepare to resist attacks; hardly a night passed without an alarm and firing, and these were often repeated several times in the same night, and not a few of the small body of defenders of Bámi were killed or wounded. But this small force not only held out, but prevented the enemy from showing himself near the place, and defeated large hostile bands at the wells of Niáz and Kára-Sangir, at Burma, and even 33 miles off at Nukhur, where the appearance of a small detachment was sufficient to compel the strong band of Taghma-Sirdár, who was trying to destroy Nukhur, to withdraw. Now, when Bámi is about to be left in rear, I think it my duty to express my heartfelt thanks to the whole garrison of Bámi,—to its brilliant commander, Colonel Verjbitski, to the Commandant, Lieutenant-Colonel Haidaroff, to the other staff officers of the place, and to Captain Melnitski of the General Staff."‡

* The 1st Battalion Shirván Regiment, a division of the 6th Battery 21st Brigade, the 3rd *sotnia* Orenburg Cossacks, and a heliograph.—*Author*.

† The 3rd Battalion Crimean Regiment, half of the 6th Battery 21st Brigade, 2 guns for the armament of Archmán, the 2nd *sotnia* 5th Orenburg Cossacks, and 3rd *sotnia* Taman Cossacks, and a heliograph.—*Author*.

‡ General Order, Trans-Caspian Field Force, No. 501, dated 19th November (1st December) 1880.—*Author*.

The first column or advanced guard of the main body arrived safely at Burma on the 26th November (8th December), and at Archmán on the 27th November (9th December), where it was met by the Nukhurites. Hákim-Bai-Babaeff, the meat contractor, had declared himself insolvent while the troops were being concentrated at Bámi; and therefore the 2nd and 3rd columns on leaving Bámi had meat for one day only. Lieutenant-Colonel Haidaroff, therefore, sent an officer from Archmán to Nukhur to buy cattle, and next day the flocks purchased were brought into Archmán, and either distributed between the 2nd and 3rd columns or sent back to Bámi.

On the 28th November (10th December) the 1st column advanced from Archmán in fighting order, but no traces of the enemy were seen except a few isolated horsemen at Burma and between Archmán and Suncha, and these were evidently vedettes. At the halt at Suncha at 11 A.M. Haidaroff received orders from the Temporary Commander of the Troops to send up infantry to Kalát to at once reinforce the cavalry. An advanced guard under Captain Melnitski of the General Staff, consisting of the 1st *sotnia* of Taman Cossacks, the Sapper and Krásnovodsk companies, and 4 guns of the 4th Battery 20th Brigade, was therefore at once pushed forward to Kalát, where it arrived at 8-30 A.M. on the 29th November (11th December).

General Petrúsevitch, who overtook Lieutenant-Colonel Haidaroff's column at the Karagán stream, found no water there except in a few reaches, and therefore resolved to construct a fort on the stream above Durun instead of on the Karagán. The site chosen was at the stone mosque of Kizil-Imám, which is surrounded by mud enclosures forming a ready-made defensive post. During the march of Lieutenant-Colonel Haidaroff's column on the 29th November (11th December), single Tekke horsemen, who came from the desert, cried out to our *jigits* that one of our convoys had been captured near Kazánjik, but nobody believed them. The column arrived at Kalát at 5 P.M. On the same day, 29th November (11th December), the Commander of the Expedition received information of the intention of the Tekkes to defend Yegyán-Bátir-Kala, but still he resolved to take this place without awaiting the arrival of the rearmost columns.

The same day General Skobeleff issued the following dispositions for an advance in four columns on Yegyán-Bátir-Kala to capture it and seize the flocks in the environs of Gok-Tapa:—

- (1) A column under Captain Baránko, composed of the Krásnovodsk company and a detachment of volunteers, is to advance from Kalát at 9 P.M., and move to the foot of the hills to cut the line of retreat, from Yegyán-Bátir-Kala to the hills, and if possible to Yangi-Kala.
- (2) Prince Eristoff with the 1st and 2nd Poltáva and 1st and 5th Taman *sotnias*, the division of Dragoons, and the Horse Mountain Division is to march at 1 A.M. on the 30th November (12th December) into the desert and to advance on Yegyán-Bátir-Kala from the direction of Gok-Tapa. The Commander of the Expedition will march with this column.
- (3) Colonel Navrotski's column is to form the reserve, and march at 1 A.M. by the straight road from Kalát to Yegyán-Bátir-Kala, and form a connecting link between it and a reserve to the first two columns. It is to consist of the 1st, 2nd, and 3rd companies of the Sámur Regiment, the Sapper Company, the Heavy Half Battery, and half of the 6th *sotnia* of Taman Cossacks.

- (4) Lieutenant-Colonel Haidaroff, with the 4th company of the Sámur Regiment, and 13th, 14th, and 15th companies of the Apsheron Regiment, half of the 6th *sotnia* of Taman Cossacks, the 3rd Mobile and Naval Batteries and the Mountain Division, is to advance with the camels and all the baggage of the first three columns at 8 A.M. on the 30th November (12th December) from Kalát to Yegyán-Bátir-Kala by the shortest road, following Colonel Navrotski.

The total of the forces destined for the operation was, therefore, 10 companies, 7 *sotnias* and squadrons, and 21 guns. The 2nd *sotnia* of Taman Cossacks was sent back to Bámi with part of the captured flocks.

The first three columns reached Yegyán-Bátir-Kala almost simultaneously at dawn, and found it unoccupied by the enemy. Between it and Gok-Tapa several flocks of sheep with armed guards had passed the night, and of these the cavalry, assisted by Captain Baránko's column, captured more than 6,000 head. The appearance of our troops in sight of the fortress of Dangil-Tapa at dawn was completely unexpected by the enemy. A few signal shots were fired, and the Tekkes expected that we would advance to the attack; but seeing that at 10 A.M. our troops had halted at Yegyán-Bátir-Kala and bivouacked, mounted parties left the fortress and formed a thick chain round Yegyán-Bátir-Kala on all sides. A little firing took place, and in the evening the enemy retired to Dangil-Tapa. About 100 Tekkes, who had been sowing their crops at Kári-Káriz, at $1\frac{1}{2}$ miles from Yegyán-Bátir-Kala, tried to stop Lieutenant-Colonel Haidaroff's column, and advanced against it at 3 P.M.; but a chain of Cossack skirmishers and a company sent out from the head of the column forced them to retire into the desert.

On the 2nd (14th) December Gogoberidze's column arrived at Yegyán-Bátir-Kala and Slovetski's at Kalát. By the 1st (13th) December, the force at Yegyán-Bátir-Kala (2,000 men) had been provided with supplies for 15 days, and had with them 700,000 rounds of infantry and 6,704 of artillery ammunition, together with 2,000 entrenching tools. Archmán, Durun, and Ka'át were occupied, the first by the 12th, the second by the 11th, and the last by the 9th and 10th companies of the Crimean Regiment; and the first two had each two guns, and Kalát four, two of which were furnished, as a temporary measure, by the mountain battery.

According to the plan laid down, the troops advancing against Gok-Tapa were to begin by occupying a point near it, which should serve as an advanced defensible depôt, and on which the force should be based for the decisive attack. It was proposed to collect in this defensible post two months' supplies for the whole Army of Operations, the necessary artillery stores, the Engineer Park, the mobile ambulance, and a section of the 4th Temporary Field Hospital. Yegyán-Bátir-Kala, which was re-named "Sámurskoye" in honour of the 1st Battalion of the Sámur Regiment which had been in the front of the army during the whole campaign, was chosen as this post, and here part of the Army of Operations had been already concentrated, and there would be no difficulty in bringing up the rest of the troops to it.

The supplies, artillery stores, ambulances, and field hospitals were partly at Bámi and partly *en route* for this place, and the commencement of active operations against Gok-Tapa depended upon the date at which all the Intendance, artillery, and hospital stores could be brought up to Sámurskoye. As it was impossible to put off the further advance against Gok-Tapa, the Commander of the Expedition resolved to commence operations as soon as 4,000 infantry, 47 guns, 9 *sotnias* of Cossacks, and 2 squadrons of Dragoons had been concentrated

at Sámurskoye and provided with supplies for two months, 300 rounds per rifle, three complements of artillery ammunition, and a section of the 4th Temporary Field Hospital.

To hasten the movement of all stores to Sámurskoye on the 30th November (12th December), General Petrúsevitch was sent to Bámi, and the 3,500 Orenburg and Mangishlák camels put at his disposal, with authority to call up 2,000 Trans-Atrak camels. At the same time, as his first care was to ensure two months' supplies for 8,000 men being made available, the Commander of the Expedition entered into an agreement with the merchant Gromoff for the latter to furnish the largest possible number of camels for this purpose. By these means, General Skobelev hoped to assemble all the troops with the necessary stores at Sámurskoye by the 10th (22nd) or 15th (27th) December.

On the 1st (13th) December the following amount of supplies was in hand at Sámurskoye:—Biscuits 601·6 cwt., buckwheat groats 184·32 cwt., rice 115·2 cwt., salt 62·72 cwt., spirits 810 gallons, tea 6·72 cwt., and sugar 62·4 cwt. This supply would last for the following time for 1,000 men:—

Biscuits	...	...	...	1 month and 3 days.
Groats	...	...	...	1 " 16 "
Rice	...	...	...	1 " 13 "
Spirits	...	...	...	3 " 23 "
Salt	...	...	...	2 " 15 "
Tea	...	...	...	2 " 18 "
Sugar	...	...	...	2 " 18 "

But for the troops at that time concentrated at Sámurskoye this supply would last only till the 16th (28th) December. As there might be delays in the march of the convoys, and as there were absolutely no oats at Sámurskoye, the Commander of the Expedition resolved to send all the cavalry away from it except one *sotnia*, so as to diminish the number of men drawing rations, and at the same time make them available for escorting convoys.

Since it was very important for our plans to hold Sámurskoye, and as its abandonment for the sake of drawing nearer to the base of supplies at Bámi would have a baneful effect, it was decided to hold out there even if it was impossible to bring up supplies by the 10th (22nd) or 15th (27th) December; and, therefore, the troops were ordered to make the supplies last as long as possible, and the rations of biscuit and groats were reduced, those of meat being increased to 1·35 lbs. per man per diem, and of spirits to three drams a week.*

Seeing that 10 companies were sufficient for the passive defence of Sámurskoye, the Commander of the Expedition sent the remainder of the infantry to the rear to strengthen the escorts of the convoys on the line between Bámi and Sámurskoye, and insisted on the special importance of sending no more troops up to the front till two months' supplies for 8,000 men had been accumulated. He ordered that "every means which can be made available for the supply of Yegyán-Bátir-Kala" was to be made use of at Bámi till the necessary supply was assured, and expressed his opinion that, although the presence of our troops at Sámurskoye would force the enemy to cease his attacks on our line of communications, the convoys should be accompanied by strong escorts. If General Petrúsevitch required troops, General Skobelev was prepared to spare him 4 out of the 10 companies of infantry, the naval battery, 4 field guns, and 3 sections of Cossacks, but only in case of extreme necessity.

* General Order, No. 518, dated 1st (13th) December 1880. "The troops at Sámurskoye will be placed on the following scale of rations from this date:—Biscuits 9 lbs., Buckwheat groats 3·6 oz., rice groats 2·4 oz., tea, sugar, &c., as before, and the ration of meat will be increased to 1·35 lbs. per diem, and that of spirits to 3 drams per man a week."—*Author*.

After pointing out that the success of everything depended upon the transport of supplies, General Skobelev stated that in any case he had provisions to last till the 20th December 1880 (1st January 1881), and that, if General Petrúsevitch required part of the garrison of Sámurskoye (4 companies, 8 guns, and $\frac{3}{4}$ *sotnia*) to strengthen the escorts, the supplies would last for 15 days longer. Finally, General Skobelev declared that he would eat horse-flesh rather than give up Sámurskoye.* "If I had known sooner," he wrote to General Annenkoff, "I would certainly have put off the advance, but it is now too late, and the thing is done. I think, therefore, that the best we can do is to use every effort to accumulate two months' supplies for 8,000 men as soon as possible. When in rear, it is difficult not to think that everything is perfect and prepared for all eventualities, but up here at the front and under fire it becomes evident that without a large reserve of strength to meet eventualities, the war cannot be carried on."†

The points occupied by our troops, Archmán, Durun, Kalát, and Yegyán-Bátir-Kala, were re-named in honour of the regiments respectively—"Poltavoskoye," "Orenburgskoye," "Krimskoye," and "Sámurskoye"—‡ by direction of the Commander of the Expedition, and were placed under the orders of the authorities of the Micháelovsk line. Temporarily, however, till the concentration of the troops at Sámurskoye and the transport of supplies to that point, the stations from Kizil-Arvat to Sámurskoye were placed under the orders of Colonel Artsishevski, and Lieutenant-Colonel Néchayeff was named as his assistant. All troops and convoys moving up the line were placed under him as Road Commandant. The Staff of the Cavalry Brigade was stationed at Durun till further orders, and the troops distributed as follows:—6th *sotnia* Lába Cossacks at Suncha, 2nd *sotnia* 5th Orenburg Cossacks at Archmán, 1st, 2nd, 3rd, and 6th *sotnias* Taman Cossacks at Durun, 1st *sotnia* 5th Orenburg Cossacks at Bámi, and 5th *sotnia* Taman Cossacks and 3rd *sotnia* 5th Orenburg Cossacks at Sámurskoye. Prince Eristoff's cavalry reserve (the divisions of Dragoons and Poltáva Cossacks and the Horse Mountain Division) was moved to Kalát and placed under the orders of Colonel Artsishevski.§ All the cavalry were to supply themselves by foraging,|| or by carrying oats on the troop horses from Bámi.

Colonel Artsishevski was to obey General Petrúsevitch's directions in all that concerned the transport of supplies to Sámurskoye, but was to act on his own responsibility in all cases when it appeared to him necessary to increase the strength of the escorts or change the route of the convoys. He was to take special care to preserve the convoys from all accidents and to spare the strength of the camels¶.

When Colonel Artsishevski was sent to the rear, Colonel Navrotski was sent from Sámurskoye to Bámi, where he was to arrive not later than on the evening of the 3rd (15th) December to take over Gromoff's and the Trans-Atrak camels, and give General Petrúsevitch the orders of the Commander of

* Letter from General Skobelev to General Petrúsevitch, dated Sámurskoye, 1st (13th) December 1880.—*Author*.

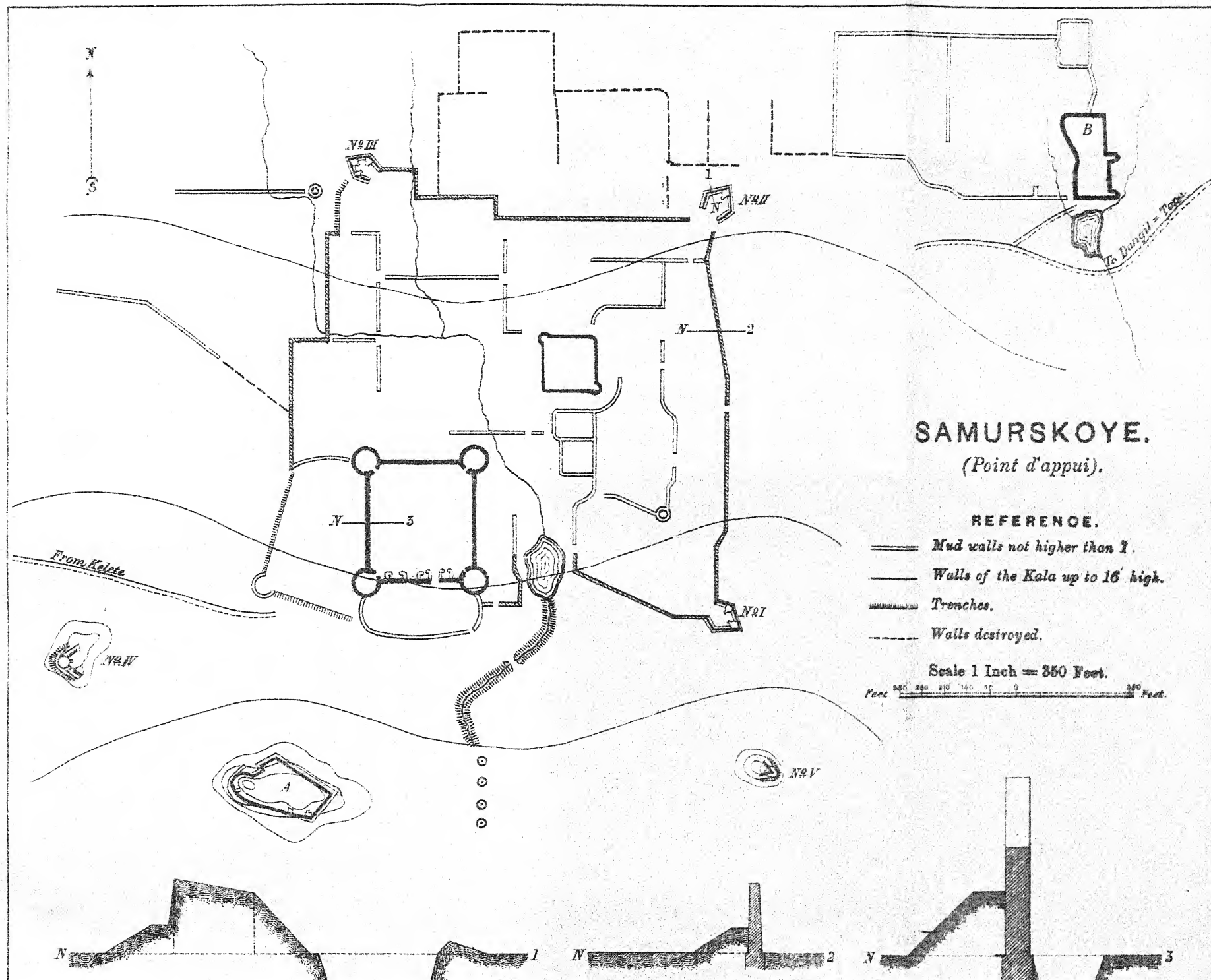
† Letter dated 3rd (15th) December 1880, No. 2185.—*Author*.

‡ General Order, Trans-Caspian Field Force, No. 520, dated 2nd (14th) December 1880. By the same order Bámi was called "Tamanskoye." The new names were not much used by the troops, except Sámurskoye, which was much simpler than Yegyán-Bátir-Kala.—*Author*.

§ General Orders, Trans-Caspian Field Force, Nos. 517, 519, and 522, dated 30th November (12th December) and 1st (13th) and 5th (17th) December.—*Author*.

|| The cavalry at Durun foraged mostly at Murcha, the cavalry reserve at Megin.—*Author*.

¶ Instructions from the Commander of the Expedition to Colonel Artsishevski, No. 2173, dated 2nd (14th) December 1880.—*Author*.



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the Expedition as to the improvement of the latter and their immediate despatch to Sámurskoye with supplies. With him was also sent the merchant Gromoff.*

As early as September the Tekkes had begun to feel a deficiency of corn, and many of them had lost all hope of being able to make head against us. The crowding in Gok-Tapa and the continual alarms had made their lives very hard, and the personality of General Skobeleff, whom the Tekkes called "gozkanli" or "bloody-eyes," and whose operations were a great contrast to those of his predecessors, had instilled terror in the ranks of our enemy. We have seen that they had already sent out men to assassinate him. Moreover, Tekkes arriving at Bujnurd at the end of October said to Yár-Muhammad-Khán: "We fear this General. If another were in his place, we might count upon a real success."† "If the Russians are numerous," said some Tekkes to our Ambassador in Persia, "we shall not fight, but shall withdraw to Marv. If, however, they only come on in the same strength as a short time ago (*i.e.*, on the 6th (18th) July), we shall fall upon them. Our fortress is now stronger than it has ever been before; our families are well protected, and it will be difficult for the Russians to get at them, as we have dug out deep holes for them to live in. Besides the supplies of flour in Gok-Tapa, we have large stores of it buried in the desert, and five *balmans* of wheat cost a *krán*.‡ If the Russians make a determined attack in force, part of our people will migrate to Persia and part to Marv. We would make peace with the Russians if we knew that they would not violate our women nor kill our men." Many desired peace, but did not dare to say so openly.§

On being refused permission to migrate into the Murgháb *oasis* or into the Khánate of Khiva, the Tekkes turned to the Governor General of Khorássán with a request that they might be allowed to settle within Persian territory at Sarakhs, Bujnurd, Kuchán, and Daragaz, and that they might be permitted to buy corn at the frontier towns of Khorássán. The authorities of Khorássán looked with some favour on these applications. As mentioned above, in consequence of Zinovieff's representations, the Persian Government had forbidden the sale of corn to the Tekkes, and now the Ambassador again requested the Governor General of Khorássán to prevent provisions being sent into Akhál. Finding it impossible, however, to watch over the fulfilment of the arrangement, the Ambassador requested Colonel Grodekoff to make confidential representations in his name to the *ilkhánis* of Bujnurd and Kuchán, requesting them to conform to the orders of the Persian Government. As for the settlement of the Tekkes on Persian territory, Zinovieff thought it necessary to directly ask the Sháh what course he intended to take. The Sháh pointed out to him that as a settlement of Tekkes at Sarakhs, which is not far from Marv, would increase the dangers threatening Persia from this quarter, he would never give his consent to it; and as for the other places mentioned above, the Sháh said that he had arrived at no decision in the matter. A

* Instructions to Colonel Navrotsky, No. 2166.—*Author*.

† Letter from Tairoff to Colonel Grodekoff from Bujnurd, dated 27th October (8th November). The Persians also remarked that in 1880 military operations were conducted both carefully and energetically. From this they concluded that we should not be long in triumphing over the enemy.—Letter from Zinovieff to General Skobeleff, dated 20th September (2nd October) 1880.—*Author*.

‡ Letter from Staff-Captain Erdeli to Colonel Grodekoff, dated Mashad, 19th (31st) October 1880.—*Author*.

§ Report from General Nasirbekoff to Zinovieff, No. 80, dated 19th (31st) October 1880.—*Author*.

short time afterwards, however, Prince Rukn-ud-Daula was ordered not to allow any Akhál-Tekkes to settle at any point on Persian territory.*

Emigration then set in towards the Tajand and Murgháb, and many families began to sell all their property, except their horses and camels, at low prices. The price of the latter rose greatly in consequence. In October the emigration had attained such dimensions† that the Council of Four had to chose 800 *yesauls* to prevent families from leaving the *oasis*, and capture and send back stragglers on the road after confiscating their property.‡

In the beginning of October some English agents appeared in Khorássán, who probably had instructions to enter into relations with the Akhál-Tekkes. Thus O'Donovan went from Mashad, where he had lived for some time, to Ratkan, and afterwards, on the 4th (16th) November, to Muhammadábád in Daragaz. He was provided with letters of introduction from Prince Rukn-ud-Daula and Abbas-Khán to the Governor of Daragaz, Muhammad-Ali-Khán. At Muhammadábád he was very well received; quarters were cleaned out for him, and servants, two *farráshes* (and a *farrásh-báshi*) were given him. O'Donovan presented a field glass to Muhammad-Ali-Khán. At the same time, however, the Ghulám§-Vali|| of Khorássán, who had accompanied O'Donovan, handed secret orders to Muhammad-Ali-Khán from Rukn-ud-Daula on no consideration to allow Mr. O'Donovan or other Englishmen to enter Akhál-Tekke.

The Russian agent at Muhammadábád, Karl Defur, had an interview with Muhammad-Ali-Khán respecting O'Donovan's arrival. At Mashad he had adopted the faith of Islám, and was everywhere known by his new name of Ali-Islám. So he awakened no suspicions in the ruler of Daragaz, who treated him with the utmost frankness, telling him that no Englishman would be allowed to cross the border, and showing him a letter he had received from Mah-tum-Kuli-Khán. The latter, replying to a message from O'Donovan, requested Muhammad-Ali-Khán to inform the correspondent that the Akhál-Tekkes did not want him, as one Englishman was of no use to them; they only wanted English troops. Defur on his part assured the Governor of Daragaz that he had no dealings either with the Russians or with the English, but that, in his opinion, he ought not to let O'Donovan visit the Tekkes, as this would be contrary to the friendship existing between Persia and Russia.¶

To the Ambassador's questions respecting O'Donovan's journey into Daragaz, Mirzá-Sayad-Khán replied that Prince Rukn-ud-Daula must have had special reasons for permitting the correspondent to depart. Private news received by Zinovieff showed, however, that the Persian Minister for Foreign Affairs had not been frank with him. It had been decided at Teherán not to prevent O'Donovan's departure, and this decision had been taken in consequence of the constant representations of the British Ambassador. The latter had given Mirza-Sayad Khán clearly to understand that he did not recognize the right of the Persian Government to close Khorássán to British travellers at a time when

* Letter from Zinovieff to General Grodekoff, No. 454, dated 8th (20th) September 1880. It is said that on the receipt of Rukn-ud-Daula's representations as to the advisability of letting the Tekkes settle at Sarakhs, the Sháh telegraphed to the Prince, calling him a "pidr-sukht" (burnt-father, the most abusive word in Persian), and ordering him to kill the settlers were they 10 men or 10,000, and have no negotiations with them.—*Author*.

† 1,500 *kibitkas* to the Murgháb, and 1,000 to the Tajand.—*Author*.

‡ Letter from Tairoff to Colonel Grodekoff, dated Bujnurd, 9th (21st) October 1880.—*Author*.

§ Ghulám = trusted slave.—*Author*.

|| Vali = Viceroy.—*Author*.

¶ Report from Karl Defur to Colonel Grodekoff, No. 2, dated 17th (29th) November 1880.—*Author*.

Russian officers were at liberty to travel freely through the whole country and collect supplies from it to support an undertaking which had nothing in the least degree in common with Persian interests.

General Zinovieff thought it unnecessary to ask Mirza-Sayad-Khán for an explanation of this circumstance, all the more as the Minister for Foreign Affairs had received an assurance from Mr. Thomson that O'Donovan would in no case cross the frontier of Khorássán, and would refrain from intriguing amongst the Tekkes. Mr. O'Donovan, however, did not consider himself bound by this promise. Having entered into arrangements with some Akhál-Tekkes, and having assumed a Turkumán dress, he left Muhammadábád and moved into the steppe. He was, however, stopped on the border and brought back to the town under escort.*

On the 12th (24th) November a man, giving himself out to be an Armenian merchant from India and a British subject, arrived at Muhammadábád. He had arrived from Isfahán, where he had been buying horses, and meant to do the same in Daragaz, whence they were to be sent to India. He gave as his name Ibrahim-Sáhib. At first he lived in the caravanserai, but afterwards moved into a house, which looked as if he meant to live there some time, and he also made known that he would buy opium, carpets, and everything that was brought. But his fair hair and blue eyes at once betrayed Ibrahim-Sáhib, and it was soon therefore patent to everyone that he was a pure Englishman, viz., Colonel Stewart.†

Besides these English agents, there appeared also in Khorássán Captains Gill and Butler. The latter was sent by the Indian Government, and after the taking of Gok-Tapa, he declared to the whole world that the Tekke fortress had been built under his directions. As this was found to be false, Captain Butler was dismissed from the army.‡

All these persons could not only be of no use to our enemies, but it is doubtful whether they ever entered into any serious relations with them.§ If they did enter into negotiation with the Tekkes, they did not succeed in obtaining their confidence; O'Donovan, because he was a drunkard and made no secret of it, but appeared in a drunken state in the bazár of Kuchán and shewed how Russian heads should be cut off—an art in which the Tekkes required no teaching, and the others because nobody knew them. The Tekkes fearing that a Russian might come to them in the disguise of an Englishman guarded their frontier carefully, and we are certain that any Englishman who ventured to penetrate to Gok-Tapa would have paid for his daring with his head, even if he did not suffer a worse fate and was cast into prison. If there were relations between the English agents and the Tekkes, they did not go beyond the usual

* Despatch from Zinovieff to the Minister for Foreign Affairs, No. 3, dated 8th (20th) January 1881.—Mr. O'Donovan does not so state the facts of his journey to the Atak, but says that soon after his arrival at Muhammadábád, the Governor of Daragaz invited him to accompany him on a journey thither. See "Marv Oasis," Chapter XXXIII.—*Author*.

† Report from Karl Defar to Colonel Grodekoff, No. 2 dated 17th (29th) November 1880.—Mr. O'Donovan states that Colonel Stewart was taking advantage of his leave to Europe to try to reach Marv, but that in consequence of the obstacles put in his way by the Persian Government, he gave up the idea and returned to Mashad, whence he travelled to Europe by Teherán and the Caspian: "The Marv Oasis," Chapter XXXIII.—*Author*.

‡ Communicated by Charles Marvin.—*Author*.

§ The War Minister wrote to General Skobelev: "In your letter you mention the continued efforts of the English to raise the Tekkes against us and afford them support. It would be very desirable if you would give precise information on this subject, such as the names of the men. In the present state of our relations with the English Government, it is doubtful whether they are official agents. (Letter from Count Milutin, dated 9th (21st) October 1880).—*Author*.

compliments and presents from the English.* With Mr. O'Donovan even this did not happen, for his letter was returned. Perhaps Nasirbekoff was right when he wrote to Colonel Grodekoff: "At Aderbeiján there is a revolt, and there are raids being carried on both in Daragaz† and Kalát. This may be attributed to the machinations of England, at the instigation of whose agents the Baluchis raided into Kain and plundered a caravan going to Yezd of a large sum. Should not measures of security be taken? The English have people everywhere, and the money which they spend in these countries would corrupt their own brothers; it is fearful how they scatter gold."‡

Abbas-Khán alone gained the confidence of the Tekkes, firstly, because he was a Mussalmán; secondly, because he was a man whom everybody in Mashad knew; and thirdly, because he was known to all the Tekkes who came to Mashad as the Consul and representative of England. He kept up relations with Mahtum-Kuli-Khán, and in the end of October addressed an inflammatory letter to him which produced a change of public opinion in Akhál. Before the date of this letter great indifference as to cultivation reigned, but after it, as help was promised to the Tekkes, the fields between Gok-Tapa and Gávárs were sown, and also those at Gok-Tapa itself, and they were irrigated as usual. Finally, the people remained within the walls of the fortress instead of migrating as usual in winter into the desert. All these were signs which showed that the Tekkes had resolved to defend themselves. There had previously been many indications that the Tekkes were thinking of abandoning Gok-Tapa, but now it appeared that they had determined to fight to the last. Ilkháni Yár-Muhammad-Khán informed Colonel Grodekoff that the Tekkes would not fight for life, but for death. They would not come out into the open field, but would remain in their fortress and conceal their wives and children in underground dwellings; they would wait till our troops approached the fortress, and would then make a sortie against them. They said that at long ranges the Russians simply burn up men, and that there was no possibility of getting at them for a hand-to-hand fight; therefore they would only make a sortie from their stronghold when the Russians were close to it. Their whole strength lay in hand-to-hand fighting, and they were of opinion that the Russians were not their equals in this. They hoped to capture a few guns, and their affairs would take a different turn.

On asking Grodekoff how many men would advance against Gok-Tapa, and on receiving an answer 20,000 with 100 guns, Yár-Muhammad-Khán remarked that this number was insufficient, for in his opinion Gok-Tapa should be blockaded and its defenders starved out. "In any case, for God's sake, do not attempt to storm it. Believe me I know the Tekkes better than you, and I have fought against them all my life. There is no braver people in the world; and now that their families are in Gok-Tapa, and they have no place to

* For example, a certain Kul-Murád-Kázi asked Mr. O'Donovan to send for him a tunic of good material with silk lining, a cap, and linen. The letter from Kul-Murád-Kázi, received by Mr. O'Donovan at Muhammadábád on the 30th November (12th December) 1880, is called by him "a letter from Mahtum-Kuli-Khán," although it was sealed by Kul-Murád-Kázi. Mr. O'Donovan says in his book that he could have maintained regular communication with the Tekkes through travellers who went to them from Muhammadábád.—*Author*.

† In November 2,000 horse and 1,000 infantry from Marv plundered the Jám district. The party quietly remained for two days at Turbat, drove off 20,000 sheep and 1,000 horned cattle, and took many prisoners. In the same month a party of 150 Akhál-Tekkes drove away 300 cattle from Shilgan, Hazár, and Meili and took eight prisoners. A column was sent after them, but the Tekkes had breech-loading rifles and defended their booty. (Report from Karl Defur, No. 2, dated 17th (29th) November 1880 from Muhammadábád).—*Author*.

‡ Letter from Nasirbekoff to Colonel Grodekoff, dated Mashad, 6th (18th) November 1880.—*Author*.

retreat to, their bravery will increase ten-fold. Remember my words, they will fight with the sword, and you will have a very difficult time of it." From all sources we heard the same story that the Tekkes would make a sortie by night and fight hand-to-hand.*

Thus there was apparently no reason for General Skobelev's fears that the Tekkes would give up the fortress without a fight. He wrote to the War Minister: "The most unfavourable thing for us that could happen would be that the Tekkes should give up Gok-Tapa without a fight. Luckily, however, all the information I have received leads me to believe that they will defend it energetically. This, moreover, is the only rational issue of the affair for us, unless they offer to submit. If the whole mass of the population of Akhál now concentrated in and in rear of Gok-Tapa made up their minds to quit it, and could gather means of transport, there is no place for them to go to, for they would neither be received in Persia, nor in Khiva, nor at Marv. They have long been at war with the Jámshidis and Hazáras. Finally, only a few rich men can nomadise for any length of time."†

After making up their minds to fight, in October the Akhál-Tekkes sent Kurbán-Murád-Ishán to Marv to ask for aid, but at the same time, in order to satisfy themselves as to the wisdom of their decision, they sent an embassy to Khiva composed of Ish-Muhammad-Bai, Háji-Murád-Kochak, Ai-Muhammad-Palwán, and Ováz-Muhammad-Sultán to ask the advice of Sayad-Muhammad-Rahim, Khán of Khiva. Keoba-Khwája was sent to Yár-Muhammad, Khán of Bujuurd, for the same purpose. The embassy to Khiva took with them identical letters for the Khán and for the Diván-Begi, Mat-Murád, sealed with the seals of Mahtum-Kuli-Khán, Muhammad-Kuli-Khán, Oráz-Muhammad-Khán, Ait-Murád-Khán, Paighámbar-Kuli, Bairam-Ali, Khán-Muhammad-Atalik, Muhammad-Ali, Khán-Shamural, Khwája-Kuli-Khán, and Kochbai-Nurnazarbayeff. Thus the only one of the Council of Four who did not put his seal to them was Hazrat-Kuli-Khán. The letters ran as follows:—"Since the time of our grandfathers and great-grandfathers this people has always belonged and still belongs to you. The time has now come when the Russian army has advanced to Bámi, and we are at Gok-Tapa and are at war with them. Thanks to God we are happy, and have sufficient provisions. Letters have come from the Elders of Khorássán to say that they desire to make peace between us and the Russians, and others of the same kind have come from the Gokláns and Yamúts. We, however, will not listen to these proposals, for our trust is in God and in you. Whatever advice or orders you give us, we will accept them freely and bow our heads; whatever orders you like to give shall be considered as your will. With the present letter we send to you Ish-Muhammad-Bai, Háji-Murád-Kochak, Ai-Muhammad-Palwán, and Ováz-Muhammad-Sultán, and we request you to believe that they are your servants."

The Ambassadors verbally requested aid from the Khán, but the latter answered that he could not help them, as the Russians were too near. The letter from the Tekkes was laid before Colonel Grotenhelm, the Commander of the Amu-Daria District, by Said-Muhammad-Rahim-Khán, and the latter was advised by Grotenhelm to recommend the Tekkes to submit to the mercy of the White Tsár and not make him angry by resisting the troops of General Skobelev; and this the Khán accordingly did.

* This was also communicated to Karl Defur straight from Akhál-Tekke (Diary of the Staff, Trans-Caspian Field Force, Section II, 1880, No. 27, Part I, page 209).—*Author*.

† Letter from General Skobelev to Count Milutin, No. 3, dated 24th September (6th October) 1880, from Krasnovodsk.—*Author*.

The Tekkes then turned for assistance to the Khivan Yamúts, but they answered that they would be glad to help them, only they feared that, directly they went to their aid the Khán of Khiva would inform the Russians, who would at once devastate their homes.* As regards Keoba Khwája's mission, Ilkháni Yár-Muhammad-Khán answered that he could only give an official reply when one of the Council of Four came to him, but his non-official answer was that the Tekkes should either make peace with the Russians or retire, as resistance would only lead to ruin. Keoba-Khwája, on returning to his house from his visit to the Ilkháni, said: "All the same we shall fight." Yár-Muhammad-Khán sent a letter by his hands to the Council of Four pointing out that, on the one hand, they asked for his advice, and, on the other, they had made raids against Nukhur and in the Mána valley; and he also bitterly remarked to Grodekoff that he was helpless to undertake anything against the Tekkes, now that they were gathered at Gok-Tapa.†

Shuja-ud-Daula was of quite another opinion on the latter point, because, as his territories between Gok-Tapa and Askhábad bordered on the Tekke *Oasis*, and as many of the flocks of the Tekkes were at pasture in the hills opposite these places, he was able to make raids upon them. Feeling that this might be the last raid in his life, Amir Hussain-Khán resolved to make it on a hitherto unheard of scale; and so he gathered 1,500 horsemen and 2,000 foot militia near the village of Fíruza, from which the blow was to be struck. In order to insure the success of the projected raid and to lull the suspicions of the Tekkes, he thought it necessary to show special attention to their envoys who were then in Shirván. On the 12th (24th) October Shuja-ud-Daula left Shirván with his staff for Fíruza.

In the meantime General Skobeleff, part of whose plan it was to get the Kurdish authorities to make raids in rear of Gok-Tapa, had received news from Colonel Grodekoff of the projected raid, and thought it ill-timed. He therefore telegraphed to Zinovieff on the 11th (23rd) October: "We shall shortly undertake our final advance, and now the Ilkháni is preparing for a raid from Bujnurd which will clash with our movements. The scene of operations—the country between Gok-Tapa and Askhábad—will be the same for us and for the people of Kuchán, and I therefore think the raid ill-timed, and request that you will put a stop to the measures taken by the *Ilkháni*, as, besides being unnecessary, they might lead to political difficulties."‡ The Persian Minister for Foreign Affairs, to whom Zinovieff communicated this telegram, answered that the Persian Government, desiring to do all they could for us, would put a stop to the expedition organized by the *Ilkháni*, and would despatch a telegram to this effect to the Governor General of Khórassán. Prince Rukn-ud-Daula, on receiving this telegram, at once sent orders to Shuja-ud-Daula to stop the raid. The order reached him before he had left Khorássán territory, and he at once obeyed it, dismissed the militia, and himself went to Kifán, the most westerly point of his district.§

Of the influential men amongst the Tekkes, as far as we know, Oráz-Muhammad-Khán (of the Council of Four), Khán-Muhammad-Atalik, Bairám-Ali-Khán, and Muzafar-Ishán were in favour of peace; and for war at any

* Report from the Governor General of Turkistán to the War Minister, No. 7148, dated 13th (25th) December 1880, and No. 18, dated 13th (25th) February 1881.—*Author*.

† Letter from Colonel Grodekoff to General Skobeleff, dated 8th (20th) November 1880, from Bujnurd.—*Author*.

‡ Telegram No. 1620.—*Author*.

§ Telegrams from the Russian Ambassador at Teherán to the Russian Minister for Foreign Affairs, St. Petersburg, Nos. 88 and 98, dated 20th October (1st November) and 8th (20th) November 1880.—*Author*.

cost were Mahtum-Kuli-Khán, Kurbán-Murád-Ishán, Karim-Verdi-Ishán, and Taghma-Sirdár. The latter told the people that, if the Russians conquered them, they would send the men away and give the women to the soldiers*; but others said that the *Ak-Padishah* had ordered all men to be killed without exception, and the women to be put in prison.

At the end of August General Skobeleff got into communication cautiously, and by verbal messages sent through Nur-Geldi-Khán, a Goklán, with Oráz-Muhammad-Khán, Khán-Muhammad-Atálik, and Nur-Muhammad-Sirdár. "I may assure Your Imperial Highness," he telegraphed to the Commander-in-Chief of the Army of the Caucasus, "that I shall lose no opportunity of trying to save a drop of precious Russian blood. But such negotiations can only be fully successful in Central Asia when one side has established an unquestioned superiority over the other."†

During his journeys to reconnoitre the Kurdish provinces lying near the Tekke border, Colonel Grodekoff had met in the village of Kifán a Tekke merchant named Oráz-Klich, and had promised him a reward for news from Gok-Tapa. In the middle of November, among other things, Oráz-Klich wrote to Colonel Grodekoff: "If you show a little money to Oráz-Muhammad-Khán and Hazrat-Kuli-Khán,‡ they will betray the Tekkes. Keep this letter secret and show it to nobody." In the beginning of the month Oráz-Klich had sent to Colonel Grodekoff a copy of Hazrat-Kuli-Khán's seal, to prove that he was inclined to make peace. Concerning Oráz-Muhammad-Khán, he wrote the following letter to Yakhya-Beg-Tairoff: "Your words have been received by us. We have understood their meaning, and are glad that you were friendly towards us. We also, considering ourselves your friend in all respects, hope to find grace in your sight. Whatever you desire, if God will, we shall fulfil. If you require anything, send somebody secretly, or come yourself for an interview to Garm-Áb, after which you may return. We shall fulfil all your desires with heartiness and good faith. Everything else will be explained after your arrival or that of your envoy." He also received a letter of the same contents from Pulát-Khán.§

These letters were received on the 19th (31st) December 1880, the day before that on which it was intended to storm Yangi-Kala, and it was too late to enter into further relations with Oráz-Muhammad-Khán or Pulát-Khán, and, moreover, Tairoff thought that these letters were only a ruse to save the writers from the ruin which threatened all. At least the Tekke sent with these letters asked Tairoff for a decoration (*nishán*) or a letter (*khat*) saying that the Russians were not to kill him. A Khán of Archmán with his companions and a certain Kurt-Asadullah living at Gok-Tapa made similar requests.||

Kurbán-Murád-Ishán, who had been sent to Marv to ask for reinforcements, attained his object. In the second-half of November news was received at Mashad to the effect that he had returned with 2,000 (and, according to some accounts, 6,000) men and several of the guns taken from the Persians in their campaign against Marv in 1861. The march of such a large body of men alarmed all Daragaz, for it was said that the Marvlis would first come to that province to procure supplies. An official of Daragaz, Muhammad-Ali-Khán, left Muhammadábád on the 18th (30th) December

* Letter from Nasirbekoff to Colonel Grodekoff, dated 23rd October (4th November) 1880, from Mashad.—*Author*.

† Telegram No. 5344, dated 17th (29th) September 1880.—*Author*.

‡ Of the Council of Four.—*Author*.

§ Diary of the Staff, No. 49.—*Author*.

|| Letter from Tairoff, dated Bujnurd, 6th (18th) December 1880.—*Author*.

with the mounted militia for the Atak, and a new report then became current that a body of men, "3,000 *kibithas* strong," was moving from Akhál to join the Marvli in their raid on Daragaz. In consequence of this Muhammad-Ali-Khán summoned all his Kurds to the Atak, "even if they had to come on mares and asses." The truth of the last rumour was that, on the night of the 12th and 13th (24th and 25th) December, 1,000 families of the Kungur tribe, with their chief Nurkalou, who were encamped outside the fortress of Dangil-Tapa, had moved out into the desert. However, neither the Kungurs nor the Marvli troubled Daragaz this time.

The Akhál-Tekkes awaited the arrival of the Marvli with great impatience, as they thought that, directly the latter arrived, they could make an attack on our lines of communication. General Skobelev received news of this at the spring of Daine on the 27th November (9th December) on his march to Kalát-Nur-Verdi-Khán, at a time when the Tekkes never dreamt of distant raids, but only thought of defending their families and property in Gok-Tapa. During the night of 20th-21st December 1880 (1st and 2nd January) 1881, when our camp was only 1,860 yards from Dangil-Tapa, the reinforcements from Marv, 2,000 strong, arrived, but without the guns, which could not be moved on account of the bad state of their carriages and wheels. These men were under the command of Kajar-Topas-Khán.

While our troops were holding Sámurskoye, criers proclaimed every day from the walls of Gok-Tapa that reinforcements were on the march from Marv, and, to encourage the families and fighting men, they said that the Russian troops were very weak, and that Gok-Tapa would hold out. As a proof of this, they cited the words of Taghma-Sirdár's son, who, on his journey from Nukhur, had seen very few Russian troops.

Taking advantage of the fact that, after the capture of Yegyán-Bátir-Kála, the whole attention of the Tekkes was turned to the Russians, the Kurds of the Kuchán province began to make raids on the Askhabád road in rear of Gok-Tapa. In one of these raids, near Firuza, 22 Tekkes were killed, and their heads sent to Shuja-ud-Daula, who forwarded them to Prince Rukn-ud-Daula at Mashad.* The Elder of the village of Garm-Áb wrote to our camp: "Since the day that you entered this country we have taken heart, and every day carry off men, camels, and sheep from the Tekkes."† In consequence of this, the Council of Four sent Muhammad-Ali-Kázi to Suja-ud-Daula with orders to explain to him the straitened condition of the people, and to ask that an end might be put to these raids. To this the *Ilkháni* gave no decisive answer.‡

The number of defenders of Gok-Tapa was estimated at 30,000, of whom 10,000 were cavalry, the total number of inhabitants being 45,000. They had among them some 5,000 firearms, of which 600 were breach-loading rifles, one bronze 6-pr. gun, and two cast-iron camel guns. All the defenders had swords and lances.

The construction of the fortress was finished, and the Russians had acquired some information concerning it from Gunner Petin, a prisoner who had succeeded in escaping from the Tekkes. He had been taken prisoner near Chát in 1878, and had been at Dangil-Tapa during the summer and autumn of 1879 and the spring and summer of 1880. He had been kept constantly in fetters,

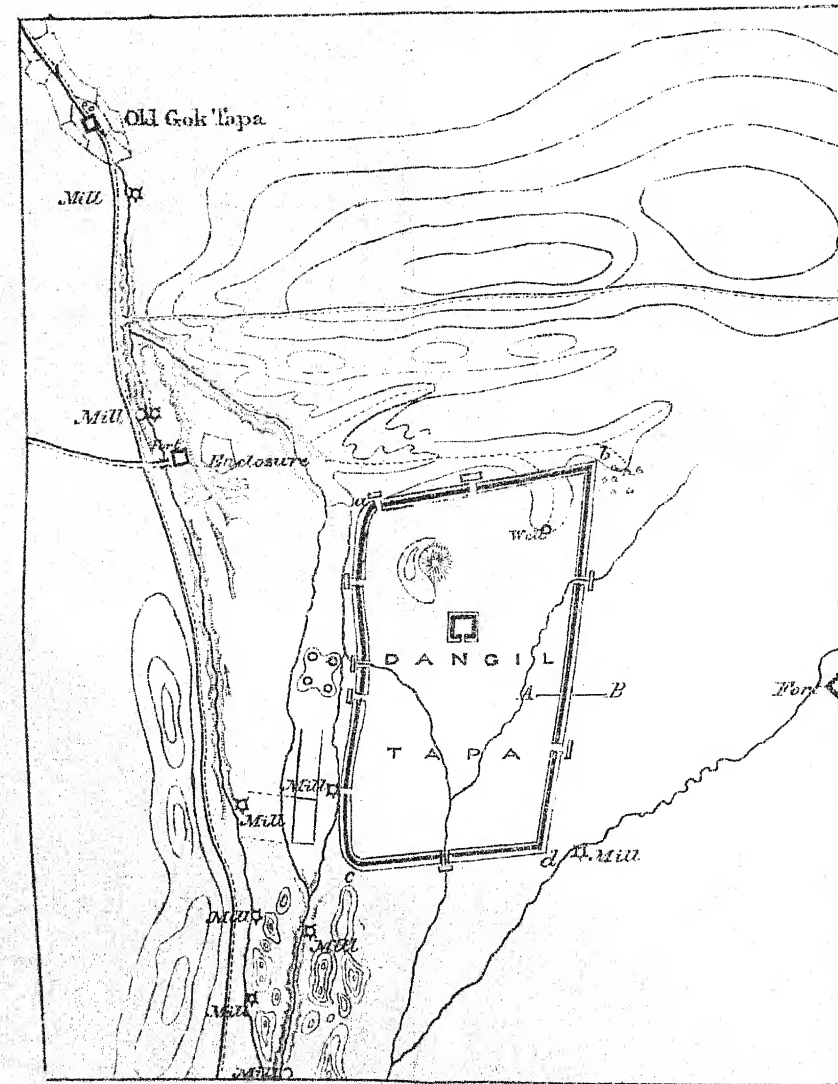
* Report from *Foiskovói-Starshina* Diakoff to the Commander of the Expedition, No. 1, dated 8th (20th) December 1880.—*Author*.

† Diary of the Staff of the Trans-Caspian Field Force, No. 26 of 1880, page 397.—*Author*.

‡ The Council of Four sent similar requests to the authorities of the other border provinces (Volkoff's Report, dated 25th December 1880 (6th January 1881).—*Author*.

FORTRESS OF DANGIL-TAPA

According to information obtained by Petin and an
eye-sketch taken in 1879.

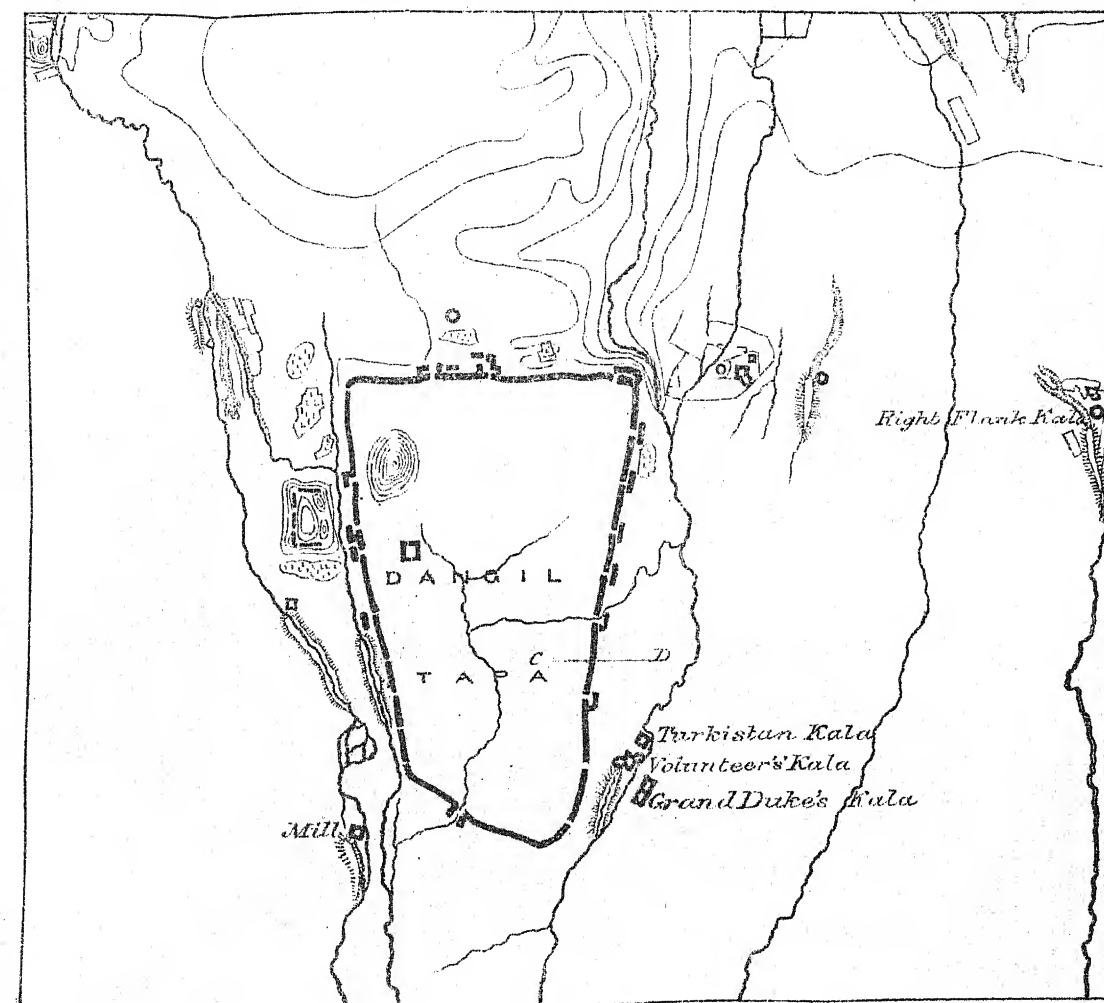


FORTRESS OF DANGIL-TAPA

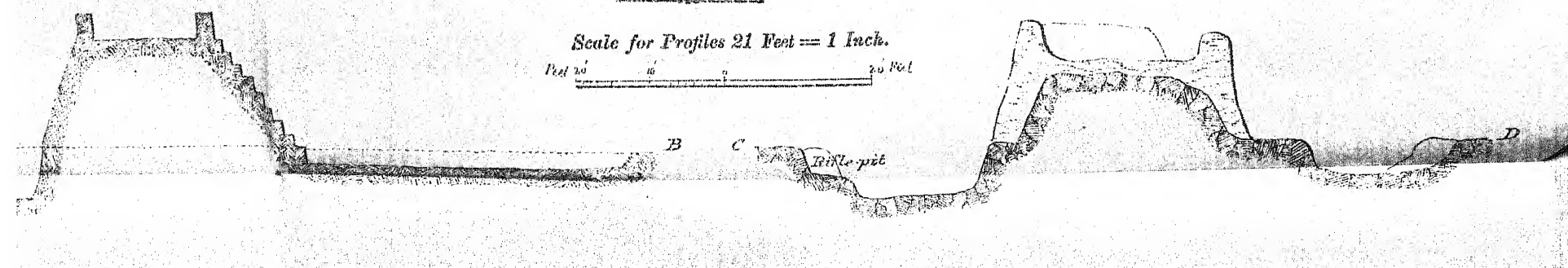
Surveyed with Instruments in 1881.

SCALE:

2,100 Feet = 1 Inch.



Profiles of the main wall of the fortress on the lines A.B.C.D





and had only been allowed to go about in the immediate neighbourhood to feed camels and gather dung. He described the interior of the fortress with tolerable fullness, and even made a large clay model of it, but the surroundings were little known to him. In his information he sometimes contradicted himself, and his memory was evidently bad; so implicit reliance was not placed on his statements, the less so because, according to his own words, he could not go about the fortress as he desired. Nevertheless, it afterwards proved that the plan and profile* of the fortress as laid down by Petin differed little from the reality. In drawing up the plan attention was paid to the information of an inhabitant of Kári-Kala, Muhammad-Ali-At-Muhammad-Ogli, who had been taken prisoner in July 1880, and had been ransomed by his relations in the end of September. After he had been ransomed he was allowed to move about freely in Dangil-Tapa. At the time of our final advance our available information was as follows:—

Dangil-Tapa was four-sided, and surrounded by a wall. The lengths of its sides were *a b* 2,562 feet, *c d* 2,058 feet, *b d* and *a c* each about 4,200 feet. All were straight except *a c*, the centre of which was somewhat bent back into the fortress.

In 1879, on the side *c d*, the wall had only been built from the angle *c* to the stream, an open space being left at the corner *a*. The whole of the encircling wall was old and in places in ruins. It had no interior trench.

During the winter of 1879-80 nobody lived in the fortress, but upon our advance from Duz-Olum to occupy Bámi in May 1880, the inhabitants of the oasis collected at Dangil-Tapa, and by July the wall had been completed and brought up to the profile shewn. It consisted of an earthen rampart 14 feet high, 35 feet thick at the base, and 17½ feet at the top. This was covered with a layer of clay, and at both ends were constructed clay walls about 4½ feet high, the exterior one being about 3 feet, the interior one 28 inches thick. Loopholes, 9 inches wide, 3 feet 6 inches apart, were cut in the exterior parapet. The approaches to the rampart from the interior were very frequent, but they were confined to ladders only wide enough for one man at a time. A ditch ran all round the wall. Its depth was not everywhere the same, being at the angles and on the sides *a c* and *c d* as much as 14 feet; on the side *a b*, and especially near *b*, 7 feet only; and on the side *b c* from 7 to 14 feet. Its breadth was from 14 to 17½ feet, and the scarp and counterscarp were almost perpendicular. There was no berm, but there was a slight curve in the general profile of the exterior slope and scarp at the level of the natural ground. The breadth of the interior trench was 42 feet, and its depth 14 to 28 inches. It was dug in the spring of 1880, to repair the walls and increase their height.

There were nine gateways, mostly from 14 to 17½ feet wide, and opposite them, at 6 paces from the counterscarp, were mud walls 28 inches thick, 7 feet high, and longer than the breadth of the gateway. There were no bridges over the ditch, but at each gateway there was a dyke; but only one of these was broad enough to permit of guns being taken over it. The dykes over the interior trench were broader than those over the ditch.

The interior of the fortress was almost flat with a few shallow hollows, but at the angles *a* and *c* it was slightly elevated. The hill of Dangil-Tapa was some 700 feet from the sides *a b* and *a c*.

Its height was about 70 feet, and on it was a gun with a parapet on all sides. The entire surface of the interior was covered with deep holes dug out without any regular system to afford shelter to the families.

* See plans.—*Author*.

At 700 feet to the south of the hill was a square fort with sides 182 feet long. Its walls were of mud and stone, 14 feet high and 28 inches thick, without loopholes or means of ascending to their upper part. It had wooden doors, 42 inches wide, and was surrounded by a shallow ditch.

A canal from the Sakiz-Yáb had been led into the fortress, which had been divided into two branches, both of which flowed out of Dangil-Tapa. The water could be easily turned off. During the spring of 1880 the inhabitants had dug a well in a hollow not far from the angle *b*, which was more than 7 feet in diameter, and had ramps leading down to it. The water in it was good for drinking.

The whole of the interior of the fortress from the edge of the trench was covered with *kibitkas* pitched in groups at intervals without any system, except round the hill and the fort, and along the road from the fort to the south. Besides *kibitkas*, there were some huts of straw and reeds, and the total number of both was computed at 15,000. There were no *kibitkas* filled with earth and joined together to strengthen the interior defence, of which mention had so often been made in the action of the 28th August (9th September) 1879.

The ground round the fortress was in general open and tolerably level, without prominent features, except a few hollows and canals, and the soil was clay and sand. From Yangi-Kala there is a slight slope down to Dangil-Tapa, but the fortress itself stands on slightly higher ground than its environs.

The Sakiz-Yáb, a stream with plenty of water, divides at Yangi-Kala into several branches. In summer, when the inhabitants are occupied in getting in their crops, it flows to a point 8 miles beyond Dangil-Tapa, and then loses itself in the sands, but in winter the people empty it above the fortress. The main branch is tolerably deep, although infantry can ford it. Its banks are so steep that ramps have to be cut for artillery to cross. On the main stream near Dangil-Tapa are seven water-mills, and camels, but not carts, can cross by their dams. The other branches are unimportant, and do not draw off much water from the stream.

The ground to the west of Dangil-Tapa is open and level, with a few sandhills beyond the Sakiz-Yáb, but between the latter and the face *ac* of the fortress the ground is much cut up by ditches, canals, and two branches of the Sakiz-Yáb. At 100 paces from the middle of the wall is a small sandhill with four peaks, which rise to the same height as the wall; and not far from the angle *c*, between two branches of the stream, are some mud walls $3\frac{1}{2}$ feet high. Among the canals are also some small sandhills, especially near the angle *c*.

At 3,500 feet from the north front is a hill, which commands the fortress in a measure. Parallel to it and 100 paces distant is a ravine. The passage across it is only difficult for infantry opposite the angle *a*.

There were supplies of corn for a considerable time in the fortress, but they were unequally distributed. There was absolutely no forage or firewood, and for these the defenders had to go out into the desert. Much corn was buried in the desert. There was cattle enough in the fortress for current consumption, but most of the flocks and herds had been driven into the desert 100 to 160 miles to the east of Gok-Tapa.

To reconnoitre the southern and western fronts of the enemy's position, and complete the information obtained on the 6th (18th) July from Petin and Muhammad-Ali-Muhammad-Ogli, it was resolved to make a reconnaissance, which was to be supported by a demonstration, for General Skobelev feared that the enemy might get accustomed to our presence and attempt to operate against our rear. The force detailed for this purpose consisted of 9 companies

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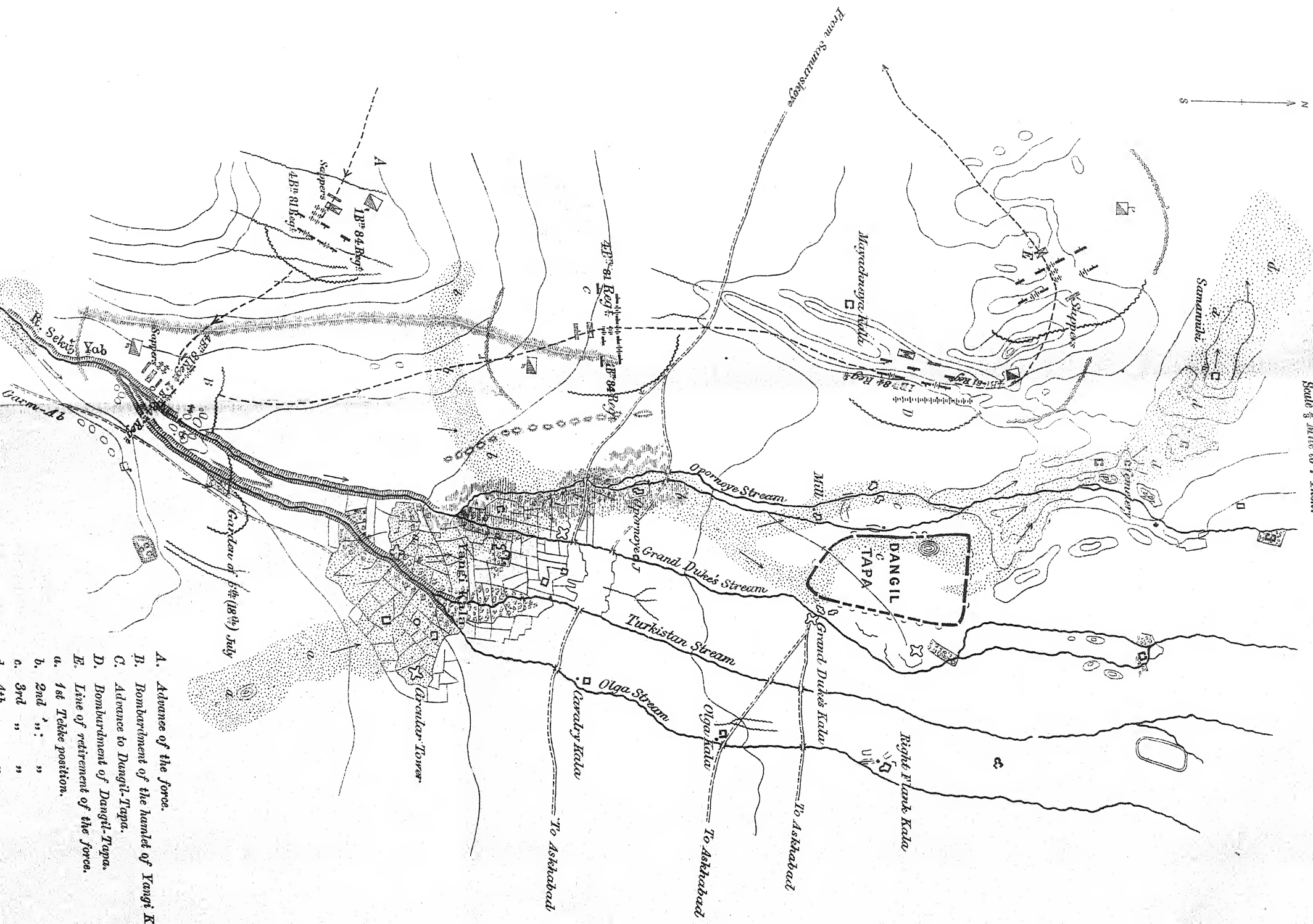
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on the 4th (16th) December 1880.

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1 1/2 Miles

Scale 2 1/2 Mile to 1 Inch.



with two military bands, 3 *sotnias*, and 16 guns—in all 1,040 bayonets, 337 sabres, and 120 gunners. 120 cartridges per rifle and 3,000 per mitrailleuse, 40 rounds for each heavy and 23 for each 4-pr. gun, were to be taken; and the force was to be accompanied by the heliographic detachment, 7 one-horse carts for wounded, and 4 ambulances of the Red Cross Society. Biscuits, tea, sugar, and cooked meat for one day were to be carried. The following orders were issued on the 3rd (15th) December: "To-morrow, the 4th (16th) December, the following troops under my personal command will advance towards Gok-Tapa:—

4th Battalion Apsheron Regiment* (Lieutenant-Colonel Prince Mahaloff).

1st Battalion Shirván Regiment (Lieutenant-Colonel Gogoberidze).

1 company 2nd Caucasus Sapper Battalion (Staff-Captain Vasiliyeff).

Volunteer detachment (Sub-Lieutenant Voropánoff).

Half of 4th Battery 20th Brigade (Captain Polkóvnikoff).

3rd Mobile Battery (Captain Micháeloff).†

Naval Battery (Lieutenant Sheman).

1½ *sotnias* 5th Orenburg Cossacks.

1½ *sotnias* Taman Cossacks.

"Lieutenant-Colonel Bobrikoff is named Commander of the Artillery.

"The force will be ready to march at 5 A.M., and will be drawn up in 'reserve formation' near the camp of the main body. The object of the operations is to reconnoitre the west front of the fortress of Gok-Tapa.

"On approaching the enemy, the force will be formed up in battle order; the 1st Battalion of the 84th Shirván Regiment with 2 guns of the Naval Battery, under Lieutenant-Colonel Gogoberidze, on the right; the 4th Battalion of the 81st Apsheron Regiment and 2 guns of the Naval Battery, under Lieutenant-Colonel Prince Mahaloff, on the left; and the Sapper company, 3 *sotnias*, and 12 guns forming the reserve under my immediate command.

"The wounded will be sent to the reserve, where a bandaging station will be established.

"I shall be with the reserve, and all reports are to be sent there.

"In the event of my being killed, the troops will be commanded by Colonel Ivánoff, who is performing the duties of Chief of the Staff; other commanding officers will be replaced by the next seniors.

"On the termination of the reconnaissance, the troops will withdraw to Sámurskoye."

The force, in reserve formation, left Sámurskoye at 5-30 A.M., and followed the road along the hills towards Yangi-Kala, 2 companies and 4 guns being left at Sámurskoye under Lieutenant-Colonel Haidaroff. When the column had marched 2½ miles from camp, a shot from the gun on the hill of Gok-Tapa warned us that the enemy had been alarmed. After marching 5½ miles, the force halted for a short time, and then resumed its march in the same order as before, and reached the Sakiz-Yáb without being opposed by the enemy.‡ The detachment of volunteers occupied the hills in front, and opened fire against the thick masses of the enemy who poured out of Dangil-Tapa into Yangi-Kala, occupying

* This battalion had only 3 companies—the 13th, 14th, and 15th.—*Author*.

† This battery had 8 guns, 3 officers (including the commander), 62 men, and 34 horses. It was horsed by the train-horses of the Apsheron, Sámur, and Shirván Battalions, and among its men were 16 train-drivers of these regiments (Report from Captain Micháeloff, No. 93, dated 5th (17th) December 1880).—*Author*.

‡ See plan of the reconnaissance of Gok-Tapa on the 4th (16th) December 1880.—*Author*.

its southern side. A division from the 3rd Mobile and another from the 4th Battery were then brought into action on the left flank of the volunteers, and half a *sotnia* of the 5th Orenburg Cossacks prolonged their line to the right. The shrapnel evidently produced an excellent effect, as the crowds of the enemy at once began to retire. When it was seen that the volunteers and Cossacks were pushing too far forward, an order was sent to them to halt and retire slowly.

About 1 p.m. the force moved forward to reconnoitre the west front of Dangil-Tapa, keeping out of rifle-range, from the direction of Yangi-Kala. Part of the enemy occupying this village at once moved off towards Dangil-Tapa, and part advanced to fall on the flank and rear of our force. The artillery had, therefore, to unlimber several times and fire a few rounds to stop them.

On coming on a level with the fortress of Dangil-Tapa, the walls of which were black with defenders armed with long pikes, the force was halted in a hollow, and the half battery 4-21st Brigade and three divisions of the Mobile Battery were brought into action to bombard the place at 1,635 yards. After that the battalion of the Apsheron Regiment was brought up to try the effect of unaimed fire at an enemy under cover, and two volleys were fired at 3,000 paces into the interior of the fortress. The enemy, who had opened musketry fire from the ramparts upon the artillery being brought into action, and had also fired some cannon-balls from the walls, retired from the ramparts after our volleys, and their fire became weaker.

At 3-40 p.m. the force left its position and continued its movement parallel to the western face, and then turned off towards Sámurskoye. The artillery, after going about 700 yards, was again brought into action and fired 26 rounds of ring-shell into the fortress, thanks to the effect of which the force marched for 2½ miles without being annoyed by the enemy. Afterwards the Tekkes began to press on the rear and flanks of the column, and horsemen were seen trotting out from the fortress with foot soldiers mounted behind them. Taking advantage of the cut up and undulating ground, these advanced to within 300 or 400 paces of our force, and dismounted both infantry and cavalry upon us. The guns were again unlimbered and drove the enemy off with their shrapnels, while the Sapper company forming the rear-guard fired some volleys.

The enemy accompanied the force for about 3½ miles, and it was only when the eclipse of the moon began that they ceased their fire against our left flank; then that against the right; and, finally, that on our rear. At 8-30 p.m. the column arrived at Sámurskoye. Its losses had been 4 men killed, 2 officers* and 19 men wounded, and 2 officers and 8 men contused. Thirteen horses were killed and 18 wounded.†

While the reconnoitring force had been before Dangil-Tapa, a party of mounted Tekkes appeared before Sámurskoye, which was held by two companies of the Sámur Regiment with four guns; but they kept beyond range, and quickly retired when three rounds were fired at them from the Engstrem guns.‡

"As my duty requires," telegraphed General Skobelev to the Commander-in-Chief, "I have to report that, according to what I said after the 6th (18th)

* Sub-Lieutenant Voropánoff of the Apsheron Regiment and Ensign Papoff of the Daghistán Regiment. The latter died subsequently at Báni.—*Author*.

† There were expended 75 rounds per cavalry, 12 per infantry rifle, and 15 rounds per gun.—*Author*.

‡ General Skobelev's Report to the Commander-in-Chief of the Army of the Caucasus, No. 2037, dated 20th February (4th March) 1881; Report from Lieutenant-Colonel Bobrikoff to the Staff of the Trans-Caspian Field Force, No. 1558, dated 17th (29th) December 1880.—*Author*.

July, the capture of Gok-Tapa will be a most serious business, and one which will necessitate a concentration of a sufficient force and great caution combined with good luck, unless the enemy themselves abandon the fortress, which rarely happens in Central Asia. As soon as I have got two months' supplies and the remaining troops and stores at Sámurskoye, I shall at once proceed to an accelerated siege of the fortress, and shall use all energy, and endeavour to finish the work as quickly as possible."*

At dawn on the day after the reconnaissance, our *jigits* were sent out towards Dangil-Tapa. On seeing some Tekkes busily employed in collecting empty cartridge-cases, they advanced upon them and fired a volley, killing one Tekke and wounding another, upon which the rest retired. The *jigits* picked up the wounded man and brought him to Sámurskoye. As he was mortally wounded, General Skobelev ordered him to be taken out next day to the hill 2 miles from Sámurskoye, and called by us Taghma-Sirdár's hill in remembrance of the 6th (18th) July, when he laid an ambuscade for us there. Two Persians were also sent with a proclamation "to the Tekke people now assembled in Gok-Tapa," which ran as follows:—

"I return to you a wounded man whom I have ordered to be clothed and attended to. If it is his fate, let him die among his own people.

"You will persist in your foolish decision to oppose the will of the mighty *Ak-Padisháh*, whose troops a short time ago conquered Erzerum and Kárs and stood under the walls of Stamboul.

"You will soon ruin all your simple working men, who have been led into error by your priests and headmen.

"When the hour of punishment arrives, your common people and their families will expiate this error with their blood. Those who are now inciting you to oppose with arms inevitable Fate will adopt timely measures to abandon the people to the just vengeance of the troops of the White Tsár.

"As the representative of His Imperial Majesty, I appeal for the last time to the good sense of the people of Akhál-Tekke, and remind them that the White Tsár is as magnanimous and merciful to those who submit to him as he is terrible to his enemies. Many millions of his true Mussulmán subjects know this."†

As the wounded man was being carried out he died, but his corpse was placed upon Taghma-Sirdár's hill and was taken away. The Persians carrying the proclamation were murdered.‡

From the 5th (17th) to the 11th (23rd) December the troops were occupied in strengthening the defences of Sámurskoye,§ in drilling, escorting convoys, carrying stores from Bámi, and in practising escalading walls with storming ladders, and in storming breaches in the wall of a *kala* (fort) in rear of the camp on the road to Kalát. Both infantry and cavalry, with the naval and mountain batteries, took part in these drills, which were carried out as follows.

* Telegram No. 8170, dated 6th (18th) December 1880.—The news of the reconnaissance of the 4th (16th) December and of the affair at Uzun-Su on the 24th November (6th December), and the reports the enemy were armed mostly with long-range firearms, and that reinforcements for them were coming up from Marv, led several authorities at St. Petersburg to form the opinion that a reserve should be formed at Petrovsk or Baku, which, at the request of the Commander of the Expedition, might be transported to the east coast of the Caspian. This proposal was not approved of by the War Minister, who said that both General Skobelev and the authorities in the Caucasus would take all measures necessary for the success of the expedition, and that they had all the means at their own disposal for so doing (Diary of the Asiatic Section of the General Staff, 1880, No. 35, Part IV, page 357).—*Author*.

† Diary of the Staff of the Trans-Caspian Field Force, 1880, No. 47, Part II.—*Author*.

‡ Telegram No. 8211, dated 8th (20th) December 1880.—*Author*.

§ See plan of Sámurskoye fortified post.—*Author*.

A company or a *soṭnia* was placed under cover at 150 or 200 paces from the wall, with mountain or naval guns behind them. At the word of command the troops rose and advanced at a quick and irregular pace towards the point which was to be stormed. Storming ladders were carried by men told off for the purpose, a few men being spare numbers in case of any of the carrying numbers being killed. The rifles were carried at the "slope," all the company-singers* were on the right flank, and the drummers followed behind the company and kept beating the attack. When the company was about 20 or 30 paces from the breach, the command was given "Charge bayonets," and at the breach "hurrah!" was cried, and the stormers rushed up it. On the breach being taken, the company fired volleys into the interior of the place; the whole were assembled and got into order, and the mountain guns or mitrailleuses were at once brought up on to the breach. During the storming the best shots were told off to fire upon the walls, and they took post along the counterscarp to prevent the enemy from firing from the parapets.†

In the event of an attack being made on Sámurskoye and beaten off, the whole garrison, except three companies and four guns, were to advance to a counter-attack. The commandant of the garrison was, therefore, ordered to daily tell off the troops who were to remain in the place. On an alarm the troops were to fall in at their posts, 2 companies with 2 mitrailleuses forming a reserve at the *kibitka* of the Commander of the Expedition.‡

The reconnaissance of the 4th (16th) December had shewn that the enemy was improving in his style of fighting, and that operations against Gok-Tapa with the number of troops which it was at first proposed to concentrate at Sámurskoye were risky. The Commander of the Expedition, therefore, sent Colonel Grodekoff, who had returned from Persia on the 5th (17th) December, to Bámi to send up as many infantry as he could to Sámurskoye by diminishing the garrisons of the other posts.

"He who desires to protect everything," wrote General Skobeleff to the Chief of the Staff at Bámi, "is everywhere weak. At the decisive moment of the campaign, there must only be one main objective, and everything else must be risked for the time. This is not now the time for caution on the lines of communication, for, till the affair here is decided, we must avoid moving convoys along it, and must give the camels comparative rest.

"The Stavropol Regiment must certainly occupy Kizil-Arvat, and also, though even partly, Khwāja-Kala and Band-Hassan. This will set troops free who can be moved up to the front. Every bayonet is of importance here. I shall also take a company from Kalát. If you think it possible, without unreasonably diminishing the garrisons, to form combined detachments of 100 men from each of the garrisons of Band-Hassan, Archmán, Durun, Kalát, Khwāja-Kala, and Band-Hassan, I shall thank you for it.

"No; now is not the time to trouble about our rear, but everything must be concentrated at the decisive point. *Ne faites jamais de petits paquets à la guerre* (Never fritter away your forces in time of war). I conclude by asking you to at once proceed to fulfil the spirit of my instructions. Every bayonet must be considered, for every one is of consequence. We must scrape together for the garrison of Sámurskoye one more non-mobilized battalion, even though it be only a weak combined one.

"At Bámi there are a number of men in hospital, &c., and these must be utilized. We *must* be strong at the decisive point. I shall expect an early report

* An institution peculiar to the Russian Army.—J. M. G.

† General Order, No. 80.—*Author*.

‡ General Order, No. 74.—*Author*.

of my orders having been carried out. Reduce the strength of the *Étappen* troops and form a spare *échelon*. Although it marches in light order, it must advance; we can equip it here from what we have in store.*

"I am convinced that the Tekkes will make no raids on our rear. They have to take care of their own heads here, and this is one of the advantages of keeping the force here, and of my plan of operations. It is, however, clear to me that the struggle with the Tekkes for their sacred Gok-Tapa will be no light matter, and that my orders of yesterday† for the strengthening by every possible means of the forces operating against it are justified by the circumstances. I repeat our business is no light one. We shall not do it without serious loss, for we cannot reckon much on the artillery. The impression produced by this arm is very deceitful, and to build one's hopes upon it is to build a house on the sand. There are many examples of this—*e.g.*, Gravelotte on the left flank of the German attack, and before Plevna on the 30th August (11th September), where we counted much on the impression produced by our artillery. We must get all the good we can out of our guns; but that military combination is badly made which does not reckon on replacing the shell and bullet by the bayonet in the long run.

"Once again I say, do not leave a single superfluous soldier in rear. All are required here. As soon as all are collected, I shall set to work without the least delay.‡

"I repeat we must devote all our attention to concentrating for the capture of Gok-Tapa, for in war at the proper time all must be subordinated to the main end. On the contrary, every day of delay increases the chance of possible accidents."

Having determined on his object, General Skobelev never swerved from it. He required that limits should be put to all undertakings in the rear, and ordered that no pursuits of the Turkomans should be made, although they appeared in view of our fortified points, and only the safety of the marches of the convoys and the speedy supply of all that they required attended to.§ He even did not allow himself to be distracted by the important, but at that time rather late, proposal of the General Officer Commanding the Lines of Communication, to buy horses in Khiva and on the Nagai steppes for the Décauville railway, but thought it more practical to diminish the demands made upon the camel transport, which, according to the plan, was to carry 9,600 cwt. of stores every month up the Micháelovsk line to Bámi, as the animals were dying fast. This was all the more possible on account of the great preparations made in Persia to supply the lines of communication till the 1st (13th) July 1881, and because in any case the supplies prepared in Persia would be delivered in the *oasis* by the end of March. The expedition had already tided over the sharp crisis when there was a chance of its failing on account of insufficiency of provisions or their being sent up too late. Forage was quite another matter, but the Commander of the Expedition thought that local resources would suffice.

General Skobelev, therefore, ordered all Government camels to be concentrated at suitable pasture grounds in rear, and every exertion made to get them into good order. He again referred to the necessity of looking after their food, and approved of the most sickly transport corps being sent to Aidin or Duz-

* General Skobelev's letter to Colonel Grodekoff, dated 11th (23rd) December 1880.—*Author*.

† Dated 11th (23rd) December 1880.—*Author*.

‡ General Skobelev's letter to General Grodekoff, dated Samurskoye, 12th (24th) December 1880.—*Author*.

§ Colonel Grodekoff's telegram to Colonel Barmin, No. 2199, dated 11th (23rd) December 1880.—*Author*.

Olum, and of the pasture grounds in the Sumbár and Chandir valleys being utilized. He considered that the wheeled and other transport with the troops would be sufficient for an advance on Askhábad after the capture of Gok-Tapa, as was included in the programme of the Expedition. The supplies for the further operations projected by the Emperor, in the broadest sense of the word, would be assured by the concentration at Askhábad of a considerable part of the supplies prepared in Persia and by replacing our exhausted artillery and Engineer stores. Consequently if, as was proposed, the camels were rested at Duz-Olum and at Aidin, where there was plenty of corn, they would be ready in good time for the latter purpose.

The Commander of the Expedition thought it necessary to stop all movements to the front till the termination of the operations against Gok-Tapa, and to do the whole work with the means which had been collected at the front, and, therefore, thought of giving the Government camels rest. The transport of the baggage of the troops from Sámurskoye to Yangi-Kala, when it was taken, was to be carried out by Gromoff's and the impressed Trans-Atrak camels. The latter General Skobelev thought necessary to keep at hand at least till the fate of the war was settled. He considered it useless to bring up oats in the first instance from Aidin, as supplies of this grain would soon arrive from Persia; and consequently the movement of the convoys along the Atrak and Micháelovsk lines, except the removal of the sick and wounded on the former, was stopped.

In view of the concentration of the Army of Operations at Sámurskoye, General Skobelev requested a section of the 4th Temporary Field Hospital to be at once sent up. If it was likely to be delayed on the road, a section of the Bámi hospital was to be sent instead, and a hospital formed out of regimental resources till the 4th Hospital arrived there.

As the projected operations seemed to necessitate some large mortars being with the force, General Skobelev ordered the ten mortars left at Chikishliar, or at least six of them, to be sent to the front, with 300 rounds a piece. He also sent for war-rockets with troughs, 350 to 400 cartridges per rifle, and all the artillery ammunition from Bámi, none being neglected.*

He proposed to fire the rockets from one of the forts, for, in his opinion, the time of field rocket batteries was passed in Central Asia, and, now that the Cossacks had the Berdan, it was a mistake to take away a whole *sotnia* from their legitimate duties. Rockets were good when our Cossacks had flint muskets, but prolonged experience of Central Asiatic warfare had shewn that they were spoilt by the dryness of the air and by carriage, that a space was formed between the walls and the composition, and that the latter got cracked, thus causing the rockets to often burst in their troughs. These considerations prevented General Skobelev from employing mounted rocket *sotnias* or batteries, but any deficiency in a rocket used in the trenches might be made harmless by the parapet. "I think seriously of constructing a rocket battery and firing off from it all our old rubbish without danger to ourselves," he wrote to Bámi on the 12th (24th) December, "as some of it may find its way into the fortress and cause no little trouble there. God be praised! In Central Asia you may fight with David's sling, if you only use force enough; and I am ready to fight even with the painted devils (rockets), for the eclipse of the moon on the 4th (16th) December struck awe into the Tekkes at Gok-Tapa. Nevertheless, he considered the pushing up of the 45th Divisional Ammunition

* General Skobelev's instructions to Colonel Petrúsevitch, No. 2182, despatched in December 1880; and his letter to Colonel Grodekoff, No. 8218, dated 8th (20th) December.—*Author*.

Column from Bámi of extreme importance; and in case of necessity recommended that the train horses of the 1st and 4th Battalions Stavropol Regiment, Cossack troop horses, and Gromoff's camels should be used to bring up the non-horsed waggons. Finally, he desired Engineer stores to be collected at Sámurskoye, especially powder, as mining entered to a certain extent* into his plan of attack on Dangil-Tapa.

On the 11th (23rd) December *jigits*, who had been observing the enemy near Gok-Tapa, reported that a great noise was audible in the fortress, and that numbers of men were moving from it to the desert, and *vice versa*. These reports led to the conclusion that either the enemy was about to retire, or that the expected reinforcements from Marv had arrived. The defenders of Gok-Tapa had on the 8th (20th) December informed our advanced posts that the latter were expected shortly.

To make certain, it was resolved to reconnoitre towards Dangil-Tapa; and for this purpose were told off a company of the 1st Sámur Regiment, the whole of the 3rd Sámur Regiment, the Sapper Company, the 5th *sotnia* Taman Cossacks, a section of the 2nd *sotnia* 5th Orenburg Cossacks, half of the 4th Battery 20th Brigade, and 2 naval mitrailleuses—in all 6 companies, 1½ *sotnias*, and 6 guns. The cavalry were ordered to push boldly forward, and the infantry and artillery to follow, all the troops taking as point of direction the hill of Gok-Tapa. About 4-30 P.M. the cavalry arrived at a point 2½ miles from the fortress and was ordered to halt, the infantry and artillery coming up at about 5 P.M., and the latter being brought into action. A mass of cavalry advanced upon the force; behind it a large body of footmen was seen leaving the fortress, and the walls of Dangil-Tapa were covered with defenders in even greater numbers than on the 4th (16th) December.

Whilst a hot fire was going on between the lines of skirmishers on either side, Tekke *jigits* rode forward to ours and cried out—"Reinforcements have come to us to-day from Marv! If you are ready, then come to us, for we, too, are ready. We do not think of peace, and advise you not to think of it either."

Our half battery fired eight rounds at the interior of the fortress, after which, to avoid loss, our troops were ordered to withdraw to Sámurskoye. This was at 5-30 P.M., and a small number of Tekkes followed the force; but at 6 P.M. firing ceased, and at 8-30 the troops reached Sámurskoye without loss.

This reconnaissance did not bring in definite news of the enemy, as the troops had started too late. General Skobeleff, therefore, determined to make a second reconnaissance next day; and detailed for it Voropánoff's detachment of volunteers, the 2nd company of the Sámur and 2nd and 3rd companies of the Shirván Regiment, 3 guns of the 4th Battery 20th Brigade, 2 naval mitrailleuses, a mixed *sotnia* of the Taman and 5th Orenburg Cossacks, and two mounted heliographs. The *sotnia* with one gun left Sámurskoye at 12-30 P.M., and marched towards the hill of Gok-Tapa, and the infantry and artillery, under Lieutenant-Colonel Haidaroff, followed at 1 P.M. About 2-30 the *sotnia* with the gun arrived at 2,300 yards from the north-west angle of Dangil-Tapa, and the gun opened fire with common shell on the interior of the fortress. The enemy's cavalry and infantry, observing our advance, marched out of the fortress, and the former occupied the sandhills on the left flank of our *sotnia*; the latter those in front of our advancing infantry. At 3 P.M. our infantry came up with the cavalry and took up a position, replacing the chain of mounted scouts by a skirmishing line of volunteers. The division of the 4-21st Brigade came

* General Skobeleff's letter to Colonel Grodeckoff, No. 8346, dated 14th (26th) December 1880.—*Author.*

into action, together with the gun which had come with the cavalry, and began to shell the interior of the fortress. Masses of the enemy kept arriving in front of the west face of the fortress, and General Skobelev thought that the retreat of his small force would be endangered, so he heliographed to Sámurskoye for Lieutenant-Colonel Gogoberidze to be sent out at once with 3 companies, 2 naval mitrailleuses, and some Cossacks to join the reconnoitring force. On receipt of this message Gogoberidze at once marched with the 11th and 12th Companies of the Sámur and the 4th of the Shirván Regiment, 2 mitrailleuses, and 30 Cossacks.

About 4 P.M. the reconnoitring force began to retire on Gogoberidze's column, which met about half-way out and formed the rear-guard.

By 5-30 P.M. all the troops had returned to Sámurskoye, having lost 1 man killed and 4 wounded (among them Surgeon Malishevski), and 3 horses killed and 7 wounded.*

During the reconnaissance of the 12th (24th), as on the previous day, Tekke *jigils* had called out to our skirmishers—"You are wearying both us and yourselves. If you are able and prepared, come on at once. We are quite ready, and will not give in quietly." General Skobelev ordered these brave men not to be fired at. "It is a pity they are quite right," he wrote "on this subject to Bámi when urging the quickest possible despatch of supplies to Sámurskoye."†

On his arrival at Bámi, General Petrúsevitch received news that supplies were failing at Kazánjik and Kizil-Arvat. A principal rule of the Expedition was, that the stations on the lines of communication and the active troops should never want for supplies; and till now, thanks to timely measures (according to the transport available, and when the numbers and transporting power could be foreseen), luck, and the aid of the merchant Gromoff, this object had hitherto been successfully attained, although with almost superhuman exertions, not only from day to day, but for long periods at a time.

To act on any other principle in the rear of the enemy would have been to expose ourselves to great disadvantages, and even to destroy with our own hands the advantages we had obtained.

General Skobelev had pointed out the evil results to the whole Expedition if any of the stations on the lines of communication had to be abandoned for want of provisions, as this might be taken by our enemies as a sign of weakness, and might cause the appearance of large bands in our rear. Such a necessity might also lead to a great change in the attitude of the Trans-Atrak Turkumáns towards us, and might cause a rising of all the tribes along the Atrak. In a word, it might lose us the results of the whole Expedition.

On the 3rd (15th) December General Petrúsevitch left Bámi for Kazánjik, and at Kizil-Arvat made arrangements for its supply with provisions‡ from the supply depôts at Khwája-Kala by means of the sickly camels which had been left in the defile of Kizil-Arvat. On the day of his arrival at Kazánjik, however, convoys arrived with a month's provisions for it and the same amount for Kizil-Arvat.

* Thirteen rounds per infantry, 80 per cavalry rifle, and 200 per mitrailleuse, also 25 rounds per gun, were expended.—*Author*.

† Diary of Military Operations for December; General Skobelev's letter, dated 12th (24th) December, 6-30 P.M.—*Author*.

‡ General Petrúsevitch did not find a single biscuit at Kizil-Arvat, but there were still some groats here. He ordered 18 lbs. of meat to be issued to the men, and that this ration was to be cooked with groats.—*Author*.

On returning on the 6th (18th) December from Kazánjik, General Petrusévitch divided the troops and camels available into *échelons*, which were to carry stores and supplies of every kind up to the front. These left for Sámurskoye in the following order:—

- (1) 8th (20th) December, with Murávieff's Transport Corps of 595 camels and 109 of Gromoff's:—

2 companies 1st Sámur and 9th Company Stavropol Regiment.

2nd Mobile Battery with 45 horses of the pack horse transport.

Half a mortar battery.

A division of Mountain Artillery.

1st Squadron 15th Dragoons.

2 *sotnias* Poltáva Cossacks.

Total 340 bayonets, 250 sabres, 15 guns.

- (2) 9th (21st) December, with the 5th (Gurieff's) Transport Corps of 1,360 camels with 493 of Gromoff's:—

10th, 11th, and 12th Companies Stavropol Regiment.

3rd Battery 19th Brigade.

1st Mobile Battery.

2 mitrailleuses and 1 4-pounder gun to arm Kalát.

1st *Sotnia* Taman Cossacks.

Total 600 bayonets, 100 sabres, 19 guns.

- (3) 10th (22nd) December, with the 4th (Bekuzároff's) Transport Corps of 1,250 camels, 250 of Gromoff's, and 70 Government camels from the Atrak transport:—

The Trans-Caspian Battalion.

2nd half of the 4th Battery 20th Brigade.

1 mountain gun.

5th *Sotnia* Lába Cossacks.

Total 450 bayonets, 5 guns, 100 sabres.

- (4) 11th (23rd) December, the Turkistán force, with its 629 camels (3 companies, 2 *sotnias*, and 2 guns).

Total 496 bayonets, 340 sabres, 2 guns, 2 rocket-troughs.

- (5) 12th (24th) December, with 1,000 of Gromoff's camels, 100 Government camels of the Atrak Transport, and 123 waggons (120 of the Akhál-Tekke transport and 8 belonging to the troops):—

3rd Battalion Shirván Regiment.

4th Battery 19th Brigade.

1st and 2nd *Sotnias* 5th Orenburg Cossacks.

Detachment of 6th *Sotnia* Taman Cossacks.

Total 496 bayonets, 220 sabres, 8 guns.

With this column marched the pack horse transport and 76 horses with flour for Archmán.

- (6) On the 13th (25th) December, with 740 of Gromoff's camels:—

1st, 13th, and 14th Companies Daghistán Regiment.

2 mountain guns.

3rd *Sotnia* 5th Orenburg Cossacks.

Total, 350 bayonets, 80 sabres, 2 guns.

With this column marched the Intendance Staff of the Force.

- (7) On the 14th (26th) December, with 75 of Gromoff's camels, 21 Government camels of the Atrak transport, and 13 regimental waggons:—

4th Battalion Apsheron Regiment.

Yesaul Iserenjaloff's detachment of volunteers.

Total 496 bayonets.

With this column marched 250 Government camels with supplies for Durun.

- (8) 15th (27th) December, with 390 of Gromoff's camels:—

3rd Battalion Apsheron Regiment.

1 division 1st Battery 21st Brigade.

$\frac{1}{2}$ of 6th *solnia* Lába Cossacks.

Total, 640 bayonets, 50 sabres, 2 guns.

With this column marched the Divisional Field Hospital of the 2' st Infantry Division for Sámurskoye, and a convoy of 400 of Gromoff's camels for Archmán and Kalát with supplies.

- (9) On the 16th (28th) December, with 150 sickly camels from the Camel Infirmary at Bámi:—

2nd, 15th, and 16th Companies Daghistán Regiment.

1 division 1st Battery 21st Brigade.

Total 330 bayonets and 2 guns.

Thus from the 8th (20th) to the 16th (28th) there left Bámi for the front 32 companies of infantry (4,200 bayonets, of whom 3,750 were newly arrived and 450 were returning from escort duty) and 55 guns (of which 47 were for the Army of Operations, 3 for the armament of defensive posts, and 5 were returning from escort duty). Of the cavalry, the two *solnias* of the Lába Cossacks and the two of the Turkistán force had not before been up to the front; the remainder were returning from escort duty.

The total number of camels was 3,205 from the overnment (Orenburg) Transport Corps, 591 from the Bámi Camel Infirmary, 3,455 of Gromoff's, and 629 from Turkistán—in all 7,890 head. In addition, 141 waggons and 76 pack horses were sent up. These carried—

- (1) All the troops' baggage (men's kits, felts, *yulameikas*, full supplies for 14 days in regimental charge, and 120 cartridges per rifle, besides those carried in the pouches).
- (2) All the artillery ammunition, 340,000 cavalry and 800,000 infantry Berdan cartridges, all other artillery stores, 9 rocket-troughs, and 280 serviceable war-rockets.
- (3) 48 cwt. of powder, sandbags, the intrenching tools of the Engineer Park which had been left behind (236 shovels, 548 hoes, 75 pickaxes, 59 crowbars, and 159 axes).
- (4) The following Intendance stores—
 - (a) For the Army of Operations,—biscuits 5,090.83 cwt., compressed food (cakes) 721.56 cwt., rye-flour 3152.64 cwt., buckwheat groats 1907.84 cwt., salt 231.68 cwt., tea 43.84 cwt., sugar 260.8 cwt., spirits 2384.1 gallons, and oats 323.2 cwt.,—total 12,014.4 cwt.
 - (b) For Archmán,—rye-flour 402.24 cwt., wheat flour 64 cwt., salt 16 cwt., tea 3.2 cwt., sugar 16 cwt., buckwheat groats 64 cwt., rice 32 cwt., spirits 270 gallons, and oats 32 cwt.,—total 661.44 cwt.

(c) For Durun,—rye-flour 800 cwt., biscuits 320 cwt., buckwheat groats 256 cwt., salt 32 cwt., tea 8 cwt., sugar 82 cwt.,—total 1,448 cwt.

(d) For Kalát,—rye-flour 320 cwt., wheat-flour 64 cwt., salt 16 cwt., tea 3·2 cwt., sugar 16 cwt., buckwheat groats 64 cwt., rice 32 cwt., oats 32 cwt., and spirits 270 gallons,—total 579·2 cwt.

The total of all supplies was, therefore, 14703·94 cwt.

(5) The 4th Temporary Field Hospital (with in addition 170 *topchás* and 120 small tables left at Krásnovodsk), the divisional hospital of the 21st Division, 320 cwt. of Red Cross stores, the divisional pack transport and reserve medicine stores, and some articles of hospital diet.

(6) *Kilítkas*, felts, various small stores, and baggage of the army staff and departments.

Thus, besides the full equipment of the force and two months' supplies for 8,000 men, there had been brought up 14 days' supplies for the men, and, by the Turkistán Force, one month's supplies and forage for 21 days. Consequently, counting the 10 days' supplies for 8,000 men brought to Sámurskoye by the force which arrived in the beginning of December, the Army of Operations was provided with supplies enough to last till the 1st (13th) March 1881 without diminishing the normal ration.

On the advance of the last *échelon*, the troops left in garrison at Bámi consisted of the 15th and 16th Companies of the Stavropol and the 2nd of the Daghistán Regiment, and the three stations on the lines of communication to the front were each occupied by one company of the 3rd Battalion Crimean Regiment, as one of its companies from Kalát had been moved up to Sámurskoye.

The 45th Divisional Ammunition Column was sent off from Petrovsk in two *échelons*,—the first (3 officers, 176 men, 96 horses, and 70·2 wheeled ammunition carts) leaving on the 30th November (12th December); the second (2 officers, 185 men, 155 troop and 6 train horses, and 34 iron ammunition waggons) on the 12th (24th) December.* These arrived at Micháelovsk on the 6th (18th) and 16th (28th) December; and thence on the 11th (23rd) the first *échelon* was marched up to Bála-Ishem. But for the 70 carts, of which 6 were loaded with ammunition for mountain guns, 10 with cavalry cartridges, and 54 with powder, there were only 94 horses;† and, therefore, a telegram was sent to Colonel Barmin to bring up the carts with ammunition and cartridges, and leave the powder carts at Bála-Ishem.

The 4th Company of the Crimean Regiment, which was equipped with General Froloff's apparatus for long-range fire, was ordered to be moved up quickly to Bámi, and a mixed company was formed on the Micháelovsk line from volunteers from the 1st Reserve Railway Battalion—in all 3 officers and 120 men.‡

Regarding the ten mortars, which arrived at Chikishliar on the 30th November (12th December), orders were given to the Commandant of the Atrak Line, General Bronevski, to move them up with all their ammunition and stores as quickly as possible. As it was known from his earlier reports that there were no means of transport at Chikishliar except those in regimental charge, General Bronevski was ordered to seize, buy, or hire camels and horses,

* Report from the Commander of the Column, No. 1399, dated 17th (29th) December 1880.—

Author.

† Telegram from Colonel Barmin, No. 82, dated 11th (23rd) December 1880.—Author.

‡ With it were sent up 500 shovels.—Author.

by any means in his power, and to requisition all transport at Chikishliar, and in case of extreme necessity, to have the mortars and their ammunition dragged by men. It was not necessary to have recourse to this last extreme measure, for the Commandant of Chikishliar, Lieutenant-Colonel Doie, found means of transport; and on the 11th (23rd) December 10 mortars, 58 boxes with shell and 18 with cartridges left Chikishliar, followed on the 12th (24th) December by the remainder of the ammunition. All were moved up by forced marches. The transport of the mortars and ammunition cost 6,000 *roubles*, for which were given 40 half-imperials and 150 *roubles* in bank silver.*

Between the 30th November (12th December) and the 20th December 1880 (1st January 1881), the following amounts of stores, &c., were brought up to Sámurskoye :—

	Provisions.	Artillery stores.	Troops' baggage.	Hospital stores.	Engineer stores.
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
30th November (12th December) ...	488·64	640	1449·6	67·2	128
1st (13th) December ...	650·24	1440	80	...	...
2nd (14th) December ...	498	1120	825·6	...	...
3rd (15th) December ...	1184	92·8	240	...	...
6th (18th) December ...	739·68	...	693·12	...	...
12th (24th) December ...	1523·2	...	279·04	...	...
13th (25th) December ...	4249·6	353·6	494·08	...	...
14th (26th) December ...	3200	692·8	819·2	320	...
15th (27th) December ...	...	...	1610·24	...	...
16th (28th) December ...	2560	...	256	1920	128
17th (29th) December ...	1536	...	358·4	...	...
18th (30th) December ...	640	...	220·16	208	...
19th (31st) December ...	102·4	576·8	998·4	...	...
20th December 1880 (1st January 1881).	...	...	384	...	...
Total ...	17271·76	4916·0	8707·84	1515·2	256
Grand Total ...	32666·8				

Among the artillery stores brought up from Bámi to Sámurskoye were :—

Rounds for light new-pattern guns ...	...	...	...	5,320
Rounds for 9-pounder guns ...	...	...	...	1,216
Rounds for 4-pounder guns ...	...	...	...	6,500
Rounds for 3-pounder guns ...	...	...	...	3,826
Rounds for 18-pounder mortars ...	...	...	...	1,000
War rockets ...	...	...	...	280
Infantry cartridges ...	...	...	...	1,525,000
Cavalry cartridges ...	...	...	...	340,000

Of the troops which came up to Sámurskoye, part were told off to return as escorts to the convoys to Bámi to bring up more stores awaiting transport to Sámurskoye. On the 1st (13th) December, a camel convoy left Sámurskoye under escort of the cavalry reserve. On its march, as it was leaving Káfir-Kala, the enemy, who had been gathering in the sands, began to fire upon it, and two dragoons' horses were killed. The Tekkes drew off towards the hills and halted near Kalát. As the two companies of the Crimean Regiment had not yet arrived at this place, Prince Eristoff continued to escort the convoy to Durun.† He had been ordered to distribute 4,000 of the sheep captured at Yegyán-Bátir-Kala down the line, *viz.*, 750 at Kalát as a supply for the garrison for a

* General Petrusévitch's Reports to the Temporary Commander of the Troops in Trans-Caspia, Nos. 388 and 411, dated 13th (25th) and 18th (30th) December 1880.—*Author*.

† Report from Prince Eristoff, No. 16, dated 1st (13th) December 1880.—*Author*.

month and for the cavalry reserve for half a month; 500 at Durun as supplies for the garrison, the Cossack *sotnia*, and troops passing through; 200 at Archmán and 2,550 at Bámi, the latter being handed over to the merchant Gromoff.*

On the 6th (18th) December, all the camels which had arrived at Sámurskoye on the 5th (17th), together with the waggons of the wheeled transport and all spare horses of the 1st Sámur Regiment and artillery, were sent to the rear under escort of three companies of the 4th Apsheron Regiment, 2 mountain guns, half of the 2nd *Sotnia* 5th Orenburg Cossacks, and a squadron of Dragoons. On the waggons all the sick and wounded were carried. The Commander of the Convoy had instructions as follows:—

- (1) Particular care was to be taken to spare the strength of the camels and horses; to give the camels as much time to feed as possible. The convoy was to march at dawn, so as to make a long halt half-way at a place where there was some forage, and give the camels not less than three hours to feed.
- (2) During the march, in camp, and especially when the animals were out at pasture, special measures of precaution were to be taken, so that the enemy might not surprise the force. When feeding, the camels were to be given plenty of room, but were not to be allowed to stray too far, so that on news of the advance of the enemy being received they might be at once gathered by the troops. The pasturages were to be watched by as small a number of Cossack posts as possible, and these were to make up for their weakness by redoubled activity. The camel-drivers and *Caravan-báshis* were to be made responsible that the camels did not stray too far; and half of these men were always to be with the herd when the animals were feeding.†

On the 13th (25th) December, a convoy of 510 camels, which had arrived on the 12th (24th) with 7 waggons detailed to bring up the Red Cross ambulance from Kalát, left Bámi under escort of the 10th and 11th Companies of the Sámur Regiment, 2 mountain guns, and a *sotnia* of Cossacks. This escort was to be back at Sámurskoye by the 18th (30th) December.‡

On the 14th (26th) December, the convoy, which had arrived on the 13th (25th), was sent back under escort of 3 companies of the 3rd Sámur Regiment, § 2 naval guns, and the 5th *Sotnia* of Taman Cossacks.||

On the 15th (27th) December, the convoy of 1,450 camels, which had arrived on the 14th (26th) December, started on their return march, escorted by the 3rd Company of the Sámur Regiment, one mitrailleuse, and a *sotnia* of Taman Cossacks. This escort was to take the convoy only to Durun, and then return to Sámurskoye on the 18th (30th) December. From Durun cavalry of Colonel Artsishevski's brigade was to escort the camels.¶

On the 17th (29th) December, a convoy left with three companies of the 3rd Stavropol Regiment, one gun, and some *jigits* under Colonel Tsiprinski.

* Instructions to Prince Eristoff, No. 2160, dated 30th November (12th December) 1880.—*Author*.

† Instructions to the Commander of the 4th Apsheron Regiment, No. 8163, dated 5th (17th) December 1880.—*Author*.

‡ Instructions to Colonel Artsishevski, No. 8319, dated 12th (24th) December 1880.—*Author*.

§ There is some mistake here. Two companies (10th and 11th) of this battalion had left already on the 13th (25th) December.—*J. M. G.*

|| Instructions to the Commandant of Sámurskoye, No. 8345, dated 13th (25th) December 1880.—*Author*.

¶ Report from Colonel Ivínoff, No. 8319, dated 14th (26th) December 1880.—*Author*.

The escort only went as far as Kalát, where it handed over the camels to the *étappen* troops and returned to Sámurskoye.*

On the evening before the advance against Yangi-Kala, *i.e.*, on the 19th (31st) December, the greater part of the cavalry on the Bámi and Sámurskoye line was concentrated at Sámurskoye. On receiving at mid-day on the 18th (30th) the order to concentrate on the 19th (31st) at this point, Colonel Artsishevski gave the following orders:—The 6th *Sotnia* Lába Cossacks to move from Suncha to Archmán, the 2nd† *Sotnia* of the 5th Orenburg Cossacks from Archmán to Durun, and the 2nd *Sotnia* of Taman Cossacks from Durun to Bámi to escort Bekuzaroff's convoy up the Chandir. He himself, with the 1st and 3rd *Sotnias* of Taman and the 2nd *Sotnia* of the 5th Orenburg Cossacks, was to arrive at Kalát on the morning of the 19th (31st), where he was to unite with the two squadrons of Dragoons, the 2nd *Sotnia* of Poltáva Cossacks, and the Horse Mountain Division under Prince Eristoff, and reach Sámurskoye the same evening. Thus the 6th *Sotnia* of Lába, the 1st *Sotnia* of Poltáva, and the 2nd and 6th *Sotnias* of Taman Cossacks did not return to Sámurskoye. At this post there were already the 5th *Sotnia* of Taman, the 5th *Sotnia* of Lába, and the 3rd *Sotnia* of the 5th Orenburg Cossacks, and the two *sotnias* of the Turkistán column.

Thus by the 20th December 1880 (1st January 1881) the following troops were concentrated at Sámurskoye:—

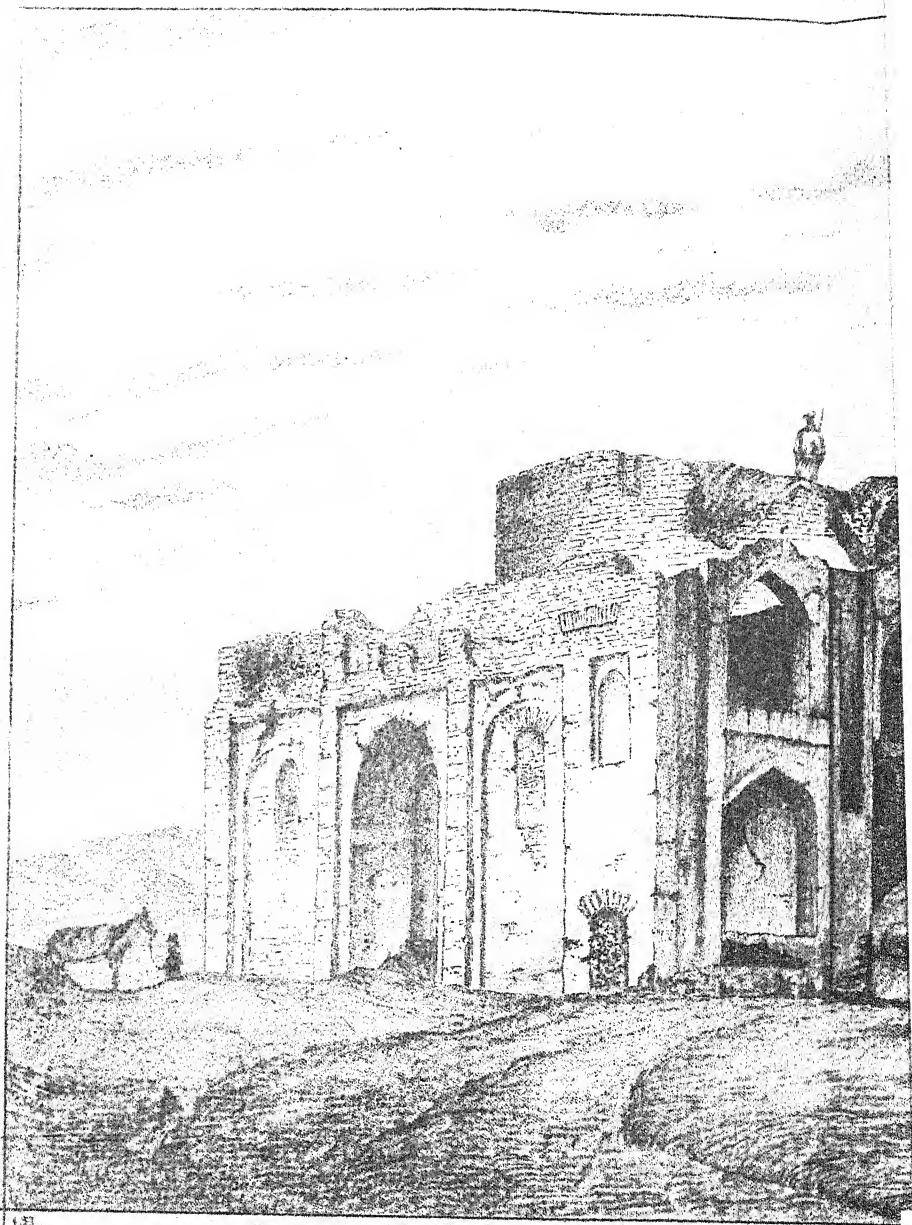
- 3rd Company 2nd Caucasus Sapper Battalion.
- 3rd Battalion Stavropol Regiment.
- 4th Battalion Apsheron Regiment.
- 1st and 3rd Battalions Sámur Regiment.
- 1st and 3rd Battalions Shirván Regiment.
- Trans-Caspian Local Battalion.
- 1st, 13th, and 14th Companies Daghistán Regiment.
- 9th Company Crimean Regiment.
- 1st and Rifle Companies 13th Turkistán Line Battalion.
- 3rd Company 5th Turkistán Line Battalion.
- Voropánoff's and Tserenjálloff's Volunteer Detachments.
- 15th (Iver) Dragoons, 2 squadrons.
- Poltáva Cossacks, 2nd *Sotnia*.
- Taman Cossacks, 1st, 3rd, and 5th *Sotnias*.
- Lába Cossacks, 5th *Sotnia*.
- 1st Orenburg Cossacks, 1st *Sotnia*.
- 5th Orenburg Cossacks, 2nd and 3rd *Sotnias*.
- 2nd Ural Cossacks, 5th *Sotnia* and rocket section.
- 3rd and 4th Batteries 19th Artillery Brigade.
- 4th Battery 20th Artillery Brigade.
- 6th Battery 21st Artillery Brigade.
- 2nd (7 guns) and 1st and 3rd (8 guns each) Mobile Batteries.
- Mortar Half Battery.
- Naval Battery (5 guns).
- 4th Battery 1st Turkistán Artillery Brigade (1st Division).
- Horse Mountain Division.
- Detachment of *Gens d'Armes*.
- Detachment of heliographers.

Total 38 companies, 11 *sotnias* and squadrons, 72 guns, 11 rocket-troughs, or 4,880 bayonets, 1,175 sabres, and 965 artillerymen—total 7,110 men.

On the march from Bámi to Sámurskoye were:—

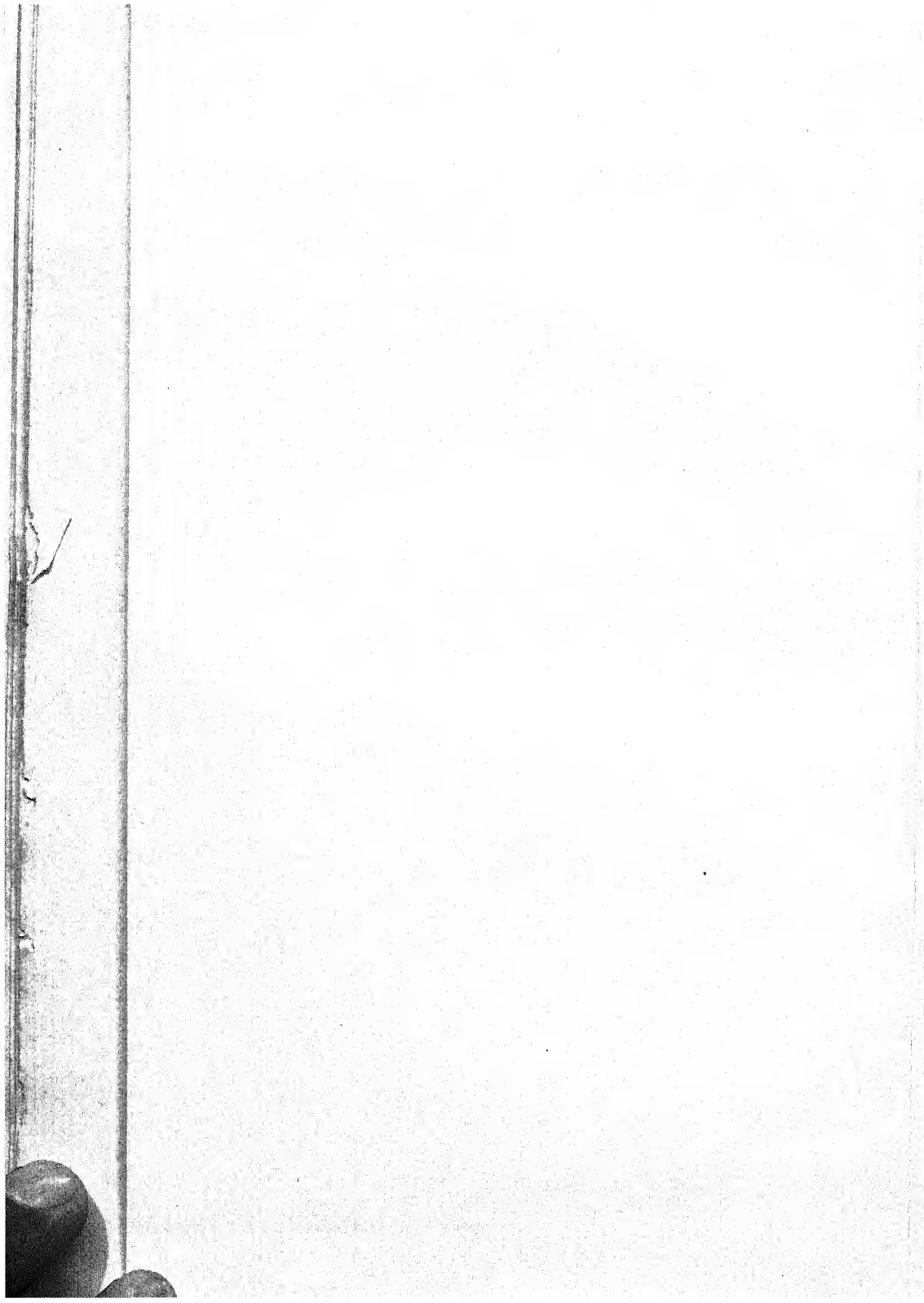
- 3rd Battalion Apsheron Regiment.
- 2nd, 15th, and 16th Companies Daghistán Regiment.
- Half of 1st Battery 21st Artillery Brigade.

* Instructions to Colonel Tsiprinski, No. 8488, dated 16th (28th) December 1880.—*Author*.
† Probably a misprint for 1st.—*J. M. G.*



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15.2.85

KIZIL IMAM,
CONVERTED INTO THE REDUOT OF THE DURUN I



The distribution of the troops on the lines of communication on the 20th December 1880 (1st January 1881) was as follows :—

Atrak Line—

Chikishliar,—3½ companies, ½ *sotnia*, 4 guns.
 Karája-Bátir,—1 company, ¼ *sotnia*, 4 guns.
 Yágli-Olum,—1 company, ¼ *sotnia*, 4 guns.
 Chát,—1 company, 1 mitrailleuse.
 Duz-Olum,—1 company, ½ *sotnia*, 1 mitrailleuse.
 Társakan,—1 company, 1 mountain gun.
 Khwája-Kala,—1 company, ½ *sotnia*, 3 guns.
 Band-Hassan,—½ company, 1 gun.

The 1st and 2nd Battalions Crimean Regiment occupied the stations from Chikishliar to Khwája-Kala; half of the 3rd Company Daghistán Regiment was at Band-Hassan; the 3rd *Sotnia* of Poltáva Cossacks from Chikishliar to Yágli-Olum; and the 4th of Taman Cossacks at Duz-Olum and Khwája-Kala. The guns were as follows :—In Chikishliar, 2 mitrailleuses and 2 9-pounder guns; at Khwája-Kala, a gun of the reserve division of the 6-21st Brigade and 2 4-pounders; at Band-Hassan, a 4-pounder gun. Besides these, the 2nd *Sotnia* of Taman Cossacks was in the Chandir valley escorting Bekuzároff's camel convoy.

Micháelovsk Line—

Krásnovodsk,—mixed detachment Krásnovodsk Local Battalion; 2 guns.
 Bála-Ishem,—1 company.
 Aidin,—1 company.
 Kazánjik,—2 companies 5th *Sotnia* Poltáva Cossacks; 1 gun.
 Kizil-Arvat,—2 companies; 2 guns.

These four last stations were occupied by parts of the Stavropol Regiment, and besides on the railway line from Micháelovsk to Aidin was the Railway Battalion (4 companies, 1,000 men).

Bámi-Sámurskoye Line—

Bámi,—4th and half of 3rd Company Daghistán Regiment	} 3½ companies. 1 <i>sotnia</i> . 5 guns.
2 companies Stavropol Regiment	
1st <i>Sotnia</i> 5th Orenburg Cossacks	
3 4-pounder guns and 2 mitrailleuses.	
Archman,—12th Company Crimean Regiment	} 1 company. 1 <i>sotnia</i> . 2 guns.
6th <i>Sotnia</i> Lába Cossacks	
1 4-pounder gun and 1 mitrailleuse	
Durun,—11th Company Crimean Regiment	} 1 company. 1 <i>sotnia</i> . 2 guns.
6th <i>Sotnia</i> Taman Cossacks	
1 4-pounder gun and 1 mitrailleuse	
Kalát,—10th Company Crimean Regiment	} 1 company. 1 <i>sotnia</i> . 3 guns.
1st <i>Sotnia</i> Poltáva Cossacks	
3 4-pounder guns	

The stations on the Atrak line were provided with supplies to last till the 1st (13th) July 1881, but those on the Micháelovsk line and on the railway were supplied by irregular convoys. Only Kazánjik and Kizil-Arvat had supplies till the 1st (13th) January 1881, but arrangements had been made for their supply to the 1st (13th) May. In consequence, however, of the General Officer Commanding the Lines of Communication having pointed out that the railway to Kazánjik would be ready by the 1st (13th) January, the Commander of the Expedition thought it advisable to provision Kazánjik and Kizil-Arvat only to the 1st (13th) March 1881, so as to give the Government camels some rest. As the amount of transport work required was thus diminished, camels could be picked out from the 3rd and 5th Transport Corps,

which had been detailed to carry supplies to those places; and these were to carry oats up to Bámi. After that both corps were to go to the Chandir valley for rest; but, as will be seen further on, this was not carried out, and only the 4th Transport Corps was sent under escort of a *sotnia* of Taman Cosacks into the Chandir valley. Gromoff's camels, after carrying stores up to Yangi-Kala where it was occupied, were to work on the Micháelovsk line, and carry up to Bámi the stores remaining in rear belonging to the 4th Temporary Field Hospital, 1,280 cwt. of wheat flour, 9,600 cwt. of oats, 3,200 cwt. of rye flour, 3,200 cwt. of biscuits, and 960 cwt. of ghee.* These stores were to be quickly delivered at Aidin.†

The railway was brought up to Bála-Ishem in December, but here for want of sleepers the work had to be stopped.

The Décauville line was laid as far as Aidin. On account of the small size of its water tank, the engine of this line could only take water enough with it to enable it to travel $3\frac{1}{2}$ miles, and in consequence it was kept at Aidin to purify the water taken from the wells there.

The military field telegraph was carried from Kazánjik up to Kizil-Arvat, where a station was opened. As the railway was pushed forward, the field telegraph steadily advanced, but, owing to the poles being too slight, communication was frequently interrupted. On the 3rd (15th) December, the telegraph line between Band-Hassan and Khwája-Kala was finished, so that Bámi was thus connected with Chikishliar. For the construction of this line, the Expedition was much indebted to telegraph official Grushetski† and to the 3rd Battalion of the Shirván Regiment.

By the 18th (30th) December the greater part of the Army of Operations had been concentrated at Sámurskoye,‡ where there was a total of 29 companies, 6 squadrons and *sotnias*, and 65 guns. The rear *échelons* were still on the march from Bámi, but General Skobeleff resolved to wait no longer, as, before decisive operations began against Dangil-Tapa, Yangi-Kala had to be captured—an undertaking for which he had a sufficient number of troops, counting those expected to arrive next day; for the reconnaissances of the 4th (16th), 11th (23rd), and 12th (24th) December had shown that the enemy would not defend this village obstinately, but would concentrate his forces for the defence of Dangil-Tapa.

The capture of Yangi-Kala, which was planned for the 20th December 1880 (1st January 1881), was the first step required for the siege of the fortress, as it would put us in possession of the watercourses supplying Dangil-Tapa. From Yangi-Kala there was a road to the Kurdish village of Garm-Ab, where our supply-depôt was; and at Yangi-Kala we were close to the road to Ashkábád.

By the 18th (30th) December a lithographed plan of Gok-Tapa, based upon the reconnaissances of the 6th (18th) July and 4th (16th), 11th (23rd), and 12th (24th) December, had been drawn up on a scale of 1,770 feet (250 *sázens*) to 1 inch,|| and on it were based the dispositions for the storming of Yangi-Kala. After assembling commanding officers, and acquainting them with the general

* Instructions to the General Officer Commanding the Lines of Communication, No. 8533, dated 17th (29th) December 1880.—*Author*.

† Instructions to Colonel Barmin, No. 2206, dated 12th (24th) December 1880.—*Author*.

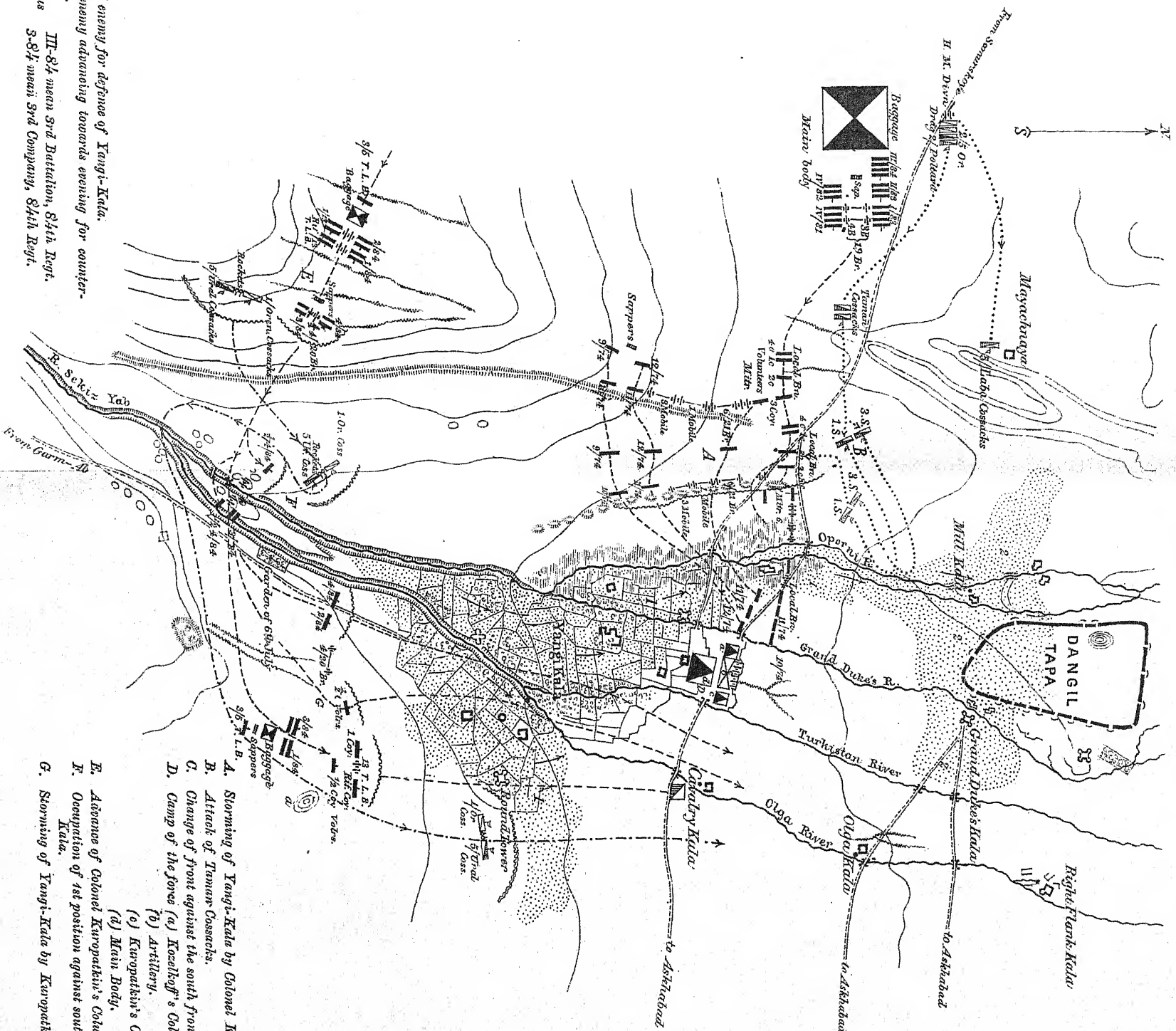
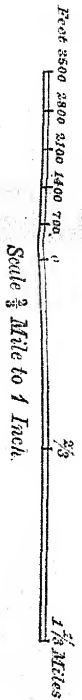
‡ Report from General Petrusévitch, No. 323, dated 7th (19th) December 1880.—*Author*.

§ On the 17th (29th) December, as large quantities of provisions had been brought up, the rations of the troops were raised to the normal issue, i.e., 2·025 lbs. of biscuits, 7·2 oz. of buck-wheat groats, and 9 lb. of meat per man *per diem* (General Order, No. 543).—*Author*.

|| See the plan.—*Author*.

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STORMING OF YANGI-KALA
on the 20th December 1890 (1st January 1891)



1. Position of enemy for defence of Yangi-Kala.
2. Masses of enemy advancing towards evening for counter-attacks.
- III-84 men 3rd Battalion, 84th Regt.
- 5-84 men 3rd Company, 84th Regt.

- A. Storming of Yangi-Kala by Colonel Kozlov's Column.
- B. Attack of Russian Cavalry.
- C. Change of front against the south front of Dangi-Tapa.
- D. Camp of the force (a) Kozlov's Column.
(b) Cavalry.
(c) Kuropatkin's Column.
- E. Advance of Colonel Kuropatkin's Column.
- F. Occupation of the position against south border of Yangi-Kala.
- G. Storming of Yangi-Kala by Kuropatkin's Column.

Indisposed at the Survey of India Office, Calcutta, February 1891.

position of affairs, the arrangements for the approaching action, and the duty of all arms and of every column on the 20th December 1880 (1st January 1881), General Skobelev thought it necessary to point out the enemy's position and our proposed operations on the ground itself, so as to convince himself that everybody understood what was required. On the 18th (30th) December, therefore, he ordered all regimental, battalion, and battery commanders* to proceed with him to Yangi-Kala, and an escort composed of the 3rd *Sotnia* of Taman and the 1st and 2nd *Sotnias* of Poltava Cossacks, a section of the 5th *sotnia* of Lába Cossacks, the 1st *Sotnia* of the 1st Orenburg and the 5th *Sotnia* of the 2nd Ural Cossacks, and the rocket section of the 1st Orenburg Cossacks, with two heliographs and two waggons of the Red Cross Society, under Lieutenant-Colonel Gulyáeff, was told off to accompany them.

At 1-15 p.m. the force left camp, and trotted to the bank within 2½ miles of Yangi-Kala, where it halted. Thanks to the quickness of its pace, the column was only observed very late by the enemy, and the signal gun to alarm the fortress was only heard when the troops had accomplished half their march. On this signal the enemy began to occupy Yangi-Kala with masses of foot and horse, with whom our scouts began to skirmish. When the force halted, all the commanding officers dismounted and ascended the bank, and then the Chief of the Staff read over the dispositions for the 20th December 1880 (1st January 1881). General Skobelev talked them over with each commanding officer, listened to objections, and explained all details on the ground. After this all mounted, and the force moved about 600 yards further forward, when General Skobelev again gave some explanations; and, on being convinced that all understood the parts they had to play, at 3-15 p.m. he gave the order to return to Sámurskoye. The chain of scouts retired slowly, followed by the enemy's horsemen, who came out from the village, and from time to time the force halted. At 3-45 it was joined by the companies of the Turkistán Line Battalions, who had been out at drill near Sámurskoye on the side nearest Gok-Tapa; and these were sent forward to fire a few rounds. After giving a few volleys at 1,200 paces, the infantry formed the rear-guard; at 4 miles from Sámurskoye the enemy halted, and the force reached camp at 5-30 p.m. During the reconnaissance, Lieutenant-General Annenkov and four men were wounded, one horse was killed and one wounded, and one round per infantry rifle and 15 per cavalry rifle were expended.

Next day the following orders were given for the 20th December 1880 (1st January 1881):—

"The enemy has occupied with his main body the fortified *auls* of Gok-Tapa, Dangil-Tapa, and Yangi-Kala.

"To-morrow, the 20th December 1880 (1st January 1881), the hamlet of Yangi-Kala will be stormed.

"Two columns are detailed for the attack:—

(1) Under Colonel Kuropátkin—

Turkistán Force.

1st Battalion 84th (Shirván) Regiment.

Sub-Lieutenant Voropánoff's Volunteer Detachment—

4th Battery 20th Brigade.

1 section of the Sapper Company.

Total 8½ companies, 2 *sotnias*, 10 guns, 2 rocket-troughs.

Object.—The south-east face of Yangi-Kala and the Round Tower.

* Besides those, about 30 officers of all arms were also present.—*Author.*

(2) Under Colonel Kozelkoff—

Trans-Caspian Local Battalion.

3rd Battalion 74th (Stavropol) Regiment.

1 section of the Sapper Company.

Detachments of Osetians, of sailors, and of volunteers under *Yesaul* Tserenjálloff—

6th (Mountain) Battery 1st Brigade.

2 mitrailleuses.

Total, $8\frac{1}{2}$ companies, 3 detachments, and 10 guns.

Object.—The north border of Yangi-Kala.

Main body under my personal command—

4th Battalion 81st (Apsheron) Regiment.

1st, 13th, and 14th Companies 82nd (Daghistán) Regiment.

1st Battalion 83rd (Sámur) Regiment.

3 companies 3rd Battalion 83rd (Sámur) Regiment.

3rd Battalion 84th (Shirván) Regiment.

3rd and 4th Batteries 19th Brigade.

6 guns each from 1st and 3rd Mobile Batteries.

Half of the Sapper Company.

7 squadrons and *sotnias*.

Horse Mountain Division.

2 mitrailleuses.

Total $18\frac{1}{2}$ companies, 7 squadrons and *sotnias*, 32 guns.

Colonel Kuropátkin's column will advance at 7-30 A.M.; Colonel Kozelkoff's and the main body at 8 A.M.

The following will remain in garrison at Sámurskoye :—

1 company 73rd (Crimean) Regiment.

1 company 3rd Battalion 83rd (Sámur) Regiment.

2 *sotnias*.*

2nd Mobile Battery (7 guns).

2 guns each from 1st and 3rd Mobile Batteries.

Half Mortar Battery.

1 mitrailleuse, 1 Engstrem gun.

Total 2 companies, 2 *sotnias*, and 19 guns (Total strength, including hospital attendants, non-combatants, and men on duty, 500 bayonets, 200 sabres, and 19 guns). *Voiskovói-Starshina* Vereshchagin is named Commandant of Sámurskoye.†

"The heliographers will be divided between the storming columns, the main body, and Sámurskoye. The men will carry biscuits, tea, sugar, and salt for 4 days, 1·8 lbs. of cooked meat mess tins, great-coats, 120 cartridges, and the Linnemann spades, and will wear uniform.

Cavalry, artillery, and train will take forage for two days.

The artillery will have one complement of ammunition per gun.

In rear of the troops will follow :—

(1) The whole Engineer Park.

(2) Three bandaging stations, one for each of the storming columns and one for the main body.

(3) The hospitals of the Sámur Infantry Regiment and Tver Dragoons.

* 2nd *Sotnia* of the 5th Orenburg and 5th *Sotnia* of Taman Cossacks.—*Author*.

† In Appendix LXXII, see plan of Sámurskoye *point d'appui* and instructions to Commandant of the same.—*Author*.

(4) The Red Cross Ambulance with 100 beds.

(5) The Red Cross waggons and hospital waggons.

"I shall be at the beginning of the action with the artillery of Colonel Kozelkoff's column, and afterwards with the main body."

The total force taking part in the attack numbered 36 companies (4,470 bayonets), 9 squadrons and *sotnia's* (975 sabres), 52 guns, and 2 rocket-troughs: total, including men with the batteries and non-combatants, 6,300 men.*

On the same day the following "Instructions to the officers of the Army of Operations" were issued:—

"The troops who have been engaged in the reconnaissances of the 6th (18th) July, 4th (16th), 11th (23rd), and 12th (24th) December are already acquainted with the enemy and the way to meet him. But troops have recently joined the force, who have not yet been engaged, and, therefore, I think it necessary to give them the following instructions:—

"The circumstances under which we have to fight are peculiar, and a series of hard struggles for localities lie before us. The enemy is brave and skilful in hand-to-hand fighting; he shoots well, and has good *armes blanches*; but he fights in masses or in small bodies, which obey the will of no one leader, and are, therefore, unable to co-operate towards the attainment of a common end.

"The various peculiarities of the theatre of war and other circumstances compel us to employ few troops, and at the same time to act on the offensive. The recognized European method of fighting is, therefore, inadmissible with our small forces. In the open field the enemy's cavalry, which is brave, well-mounted and skilled in the use of its arms, would be a source of the greatest danger to long, thin, fighting lines; and his infantry masses, although badly organized, are composed of brave, strong, and skilful men, and would, of course, seek to turn the fight to their own advantage by rushing to close quarters.

"The main principle of Asiatic tactics is to preserve close formations.

"In combats, such as we shall shortly have against an enemy who holds a position covered by gardens, buildings, and walls, previously carefully prepared, we must expect an obstinate defence, and this species of position will be preferred by the enemy—firstly, because it was against such a one that we failed last year; and secondly, because it also protects the families and property of the defenders. We shall have to enter on a life-and-death struggle against knives and *yatagans*. Long, thin lines, in which troops easily get out of hand, and separated into small groups, which cannot obey the will of their common leader, prevent the latter from opposing strong formations, in which the superior discipline and mobility of our troops tell most in the event of sudden or unexpected hostile attacks. The observance of the principle of close formations is the secret of good Asiatic tactics, and will enable us to look forward with confidence to the result of a struggle, however superior the enemy be in number.

"We shall defeat the enemy by means of those attributes which he does not possess. We shall take advantage of our superior discipline and quick-firing arms. We shall conquer by means of close, mobile, and pliable formations; by careful, well-aimed volley firing, and by the bayonet, which in the hands of men who by discipline and soldier-like feeling have been made into a united body—the column is always to be feared.

* In Appendix LXXIII, see Return of the number of bayonets and sabres in the Yangi-Kala attacking columns on the 20th December 1880 (1st January 1881).—*Author*.

"The attack of the enemy's cavalry is to be met by corresponding change of front, if necessary, and by volleys at short ranges. I recommend even squares (battalion or other) when circumstances permit.

"Volleys are to be used against an attacking force, cavalry or infantry, when it arrives at 600 paces from our line; but it must also be remarked that volleys at long ranges on close masses, whether under cover of walls, &c., or in the open, are very effective. In such cases volley fire may be opened at 3,000 paces, the sights being varied,* and an aim being taken at the top of the wall, or even over it. Such indirect firing at 3,000 paces is, however, only to be carried out by parties of the strength of a company or under: it requires careful control by the commander of the party.

"Mitrailleuses are to be used exclusively in close connection with infantry or dismounted cavalry, like the former regimental guns; all other guns are at first to be kept in reserve, so that they may be used in masses where required; and so good results will be obtained by a few dozen guns working under one man's will. Artillery is only to be brought up from the reserve on my express order, but its taking up position and the choice of the object to be fired at is the business of the commander of the artillery. Souvóroff's well-known saying—"The artillery follows its own sweet will"—must constantly be kept in mind by artillery commanders, and also the commanders of the detachments to which they are attached. But all this holds good only till the holy (*sic*) signal for the attack is given. In this holy (*sic*) moment, the artillery must devote itself to closely supporting its comrades without the slightest regard for itself; it must come up in line with the attacking party, and shatter the enemy by its fire at close ranges, which has always a depressing moral effect on him. All purely technical (artillery) maxims must then be set aside. In the decisive moment the artillery must have a soul, for the gunner is not a mere machine. The artillery must, if necessary, sacrifice itself that the attack may succeed, and expose itself as the infantry do in an attack. Its escort provides for its safety, and the shame of losing a gun is not borne by the artillery, but by the other troops.

"The cavalry is to be kept in reserve till circumstances permit of its action in masses, and our cavalry must not let itself be drawn into isolated fights with a numerous enemy, possessed of splendid horses, and accustomed from childhood to the use of *l'arme blanche*. As long as the enemy's cavalry is unshaken and is not in an unfavourable position, *e.g.*, with an obstacle in rear, in a hollow, &c., our cavalry must not enter on a combat with it. Pursuit of a retreating Turkumán cavalry is useless, as it only breaks up the tactical formations—our onestrong point and sheet-anchor. Cavalry must attack in close formation, which even infers no intervals being left between regiments, squadrons, or *solnias*.

"In attacks so much importance is not to be attached to the pace as to the keeping knee to knee; and attacks only to be made under favourable conditions must, therefore, be short, so that the troops may not get out of hand. The shock must be carried out in close order and with decision; in a word, caution and care must be the fundamental principles of our cavalry tactics in action.

"On the contrary, attacks against disordered masses of infantry, as all Asiatic militias are, must be made with *élan*, although dash must be tempered by order and caution, and sufficient reserves must be kept.

* The Berdan is sighted to 1,500 paces, and aim is invariably taken at the bottom of the object.—J. M. G.

"I must refer to the extreme importance of careful performance of outpost duty while in camp before Gok-Tapa. The commanders of outposts must realize the importance of the roads, which lead from our camp to the points where the enemy can assemble for sorties. Each commander must study and carefully watch the ground in his front, and take all measures for supporting the parties on each flank; for I repeat that co-operation is the key of victory. Ranges are to be measured. This last point must be carefully attended to, as experience has shown how difficult the conduct of a fight by night is. Any deviating from certain lines of fire may lead to firing on friendly troops, and thence to confusion and disaster. I also draw attention to the utility of putting up marks by which the men may recognize the various ranges. Large heaps of wood, which can be kept burning all night, and behind which the picquets or even sentries are placed, are of great use. No large fires must, however, be lighted in camp without permission of the officer commanding; and in the event of an attack, all fires in camp must be at once extinguished.

"While by day a combat is decided by carefully utilizing the ground and the means at one's disposal, by night everything becomes more complicated, and more energetic action is required. Therefore, by night, volley firing alone is allowed. It must be remembered that distances are judged with difficulty by night, and soldiers should, therefore, be impressed with the necessity of aiming low."

In addition to these instructions, General Skobeleff thought it advisable to give the following additional orders to Colonel Kozelkoff, commanding the Left Storming Column:—

"Do not throw all your force into the fighting line, but only into a part of it; and do not seek to attain your object so much by taking advantage of the ground as by concentrating the fire of the fighting line and increasing its intensity.

"In the attack of Yangi-Kala you will meet with a whole array of parallel obstacles running along the position of the enemy, *viz.*, a row of wells in front of the hamlet, one of the branches of the Sakiz-Yáb which flows by Opornoye, and then several other branches of the same stream which flow through Yangi-Kala.* I therefore recommend you not to scatter your troops all over the hamlet, but to conquer it bit by bit; make sure of the part you have captured; get your men into order again, and then prepare your further advance by a strong concentrated fire against your enemy at close ranges, conducting the fight by fire rather than by the bayonet, for I wish to avoid hand-to-hand fighting, if possible. We must not do what the enemy wishes us to do. He desires a hand-to-hand combat, and, therefore, he must not have it.

"Having prepared your further advance by fire, re-establish order and communication amongst the troops; and having placed the reserves in the proper positions, you must point out to the troops the next object to be aimed at, confining yourself, as far as possible, to objects defined by local features.

"Remember that, with our small numbers and in such cut-up ground, it is essential that the troops do not get out of the hand of their leaders, and that all aim at one object and obey one will.

"On breaking into a part of the village, a reduct should at once be formed, such as in a kala. If the enemy drives us back, the existence of such a reduct will prevent us from losing what has been conquered. The neglect of these

* The Sakiz-Yáb flows between very steep and difficult banks, which might hinder the advance even of infantry.—*Author.*

elementary military principles in such cut-up ground was the principal cause of our failure before Andiján on the 1st (13th) October 1875.”*

Verbal orders were given to Colonel Kuropátkin, commanding the Right Column.

The troops passed the 19th (31st) in preparing for the attack next day, and the enemy did not disturb them. The last reports brought in by our *jigits* were short and suggestive:—“The Tekkes expect us, and do not think of retreat or of peace; a *gázural* (holy war for the faith) has been proclaimed.” On the morning of this day an order was given to the troops detailed for the storming of Yangi-Kala to strike their *kibitkas* and *yulameikas* at sundown, and deposit them in places to be pointed out by *Voiskovói-Starshina* Vereshtshagin, the commandant of Sámurskoye. Six men per battalion, two per *sotnia*, squadron or detached company, and 3 per battery, were to be left with the baggage in the fort. The Intendant of the Force was ordered to have prepared by the 21st, December (2nd January) 1881, 15 days’ supplies of biscuits, groats, salt, tea, and sugar for 7,000 men, which were to be brought up to Yangi-Kala on that day.† The troops were informed that during the action only the calls for “attack” and “rally” or “cease-firing” were to be sounded, the latter only by the Commander of the Expedition; no other bugle calls were allowed.‡

The Engineer Park consisted of 1,222 shovels, 386 hoes with picks, 270 axes, 60 crowbars, 350 hoes, 100 pickaxes, 4,200 sandbags, 2,180 provision sacks, forges, saws, augurs, carpenter’s tools, 5 electric and mining stoves, 48 cwt. of powder, 3,500 feet of quickmatch, 13 boxes of dynamite, pyr-oxyline mines, 8 storming ladders, various building materials, &c. This pack required 22 waggons to carry it.§ Besides the above, the troops had the following entrenching tools:—1,804 Linnemann spades and 220 Linnemann axes, and 209 ordinary shovels, 5 pickaxes, 62 hoes, and 112 axes.||

The force was also accompanied by the so-called combined ambulance of the Red Cross Society and of the Sámur Regiment. It consisted of 150 beds furnished by the Society and 20 of the Sámur Regiment. Forty men of the 4th Temporary Field Hospital were told off to it, and its superintendence was entrusted to the Commander of the Hospital of the 1st Battalion Sámur Regiment, according to the rules laid down for military hospitals.¶ Twenty-five waggons were allotted to it as transport. There were three bandaging stations, two being furnished by the Red Cross Society. The 4th Temporary Field Hospital was left at Sámurskoye.

Each company, *sotnia*, and squadron was ordered to have with it matches and a bundle of dry grass to set fire to all we took.** All the baggage was carried by the Akhál-Tekke wheeled transport and by the regimental waggons.

At 7 A.M. on the 20th December 1880 (1st January 1881) the troops detailed for the storming of Yangi-Kala were drawn up in front of Sámurskoye towards Gok-Tapa, with Colonel Kuropátkin’s column on the right, that of

* Instructions from General Skobeleff to Colonel Kozelkoff, No. 8642, dated 20th December 1880 (1st January 1881).—*Author*.

† Instructions to the Intendant of the Advanced Force, No. 8601, dated 18th (30th) December 1880.—*Author*.

‡ Circular to the Trans-Caspian Field Force, No. 84, dated 19th (31st) December 1880.—*Author*.

§ Diary of the Staff of the Trans-Caspian Field Force, No. 22 of 1880.—*Author*.

|| In Appendix LXXIV, see Return of the entrenching tools.—*Author*.

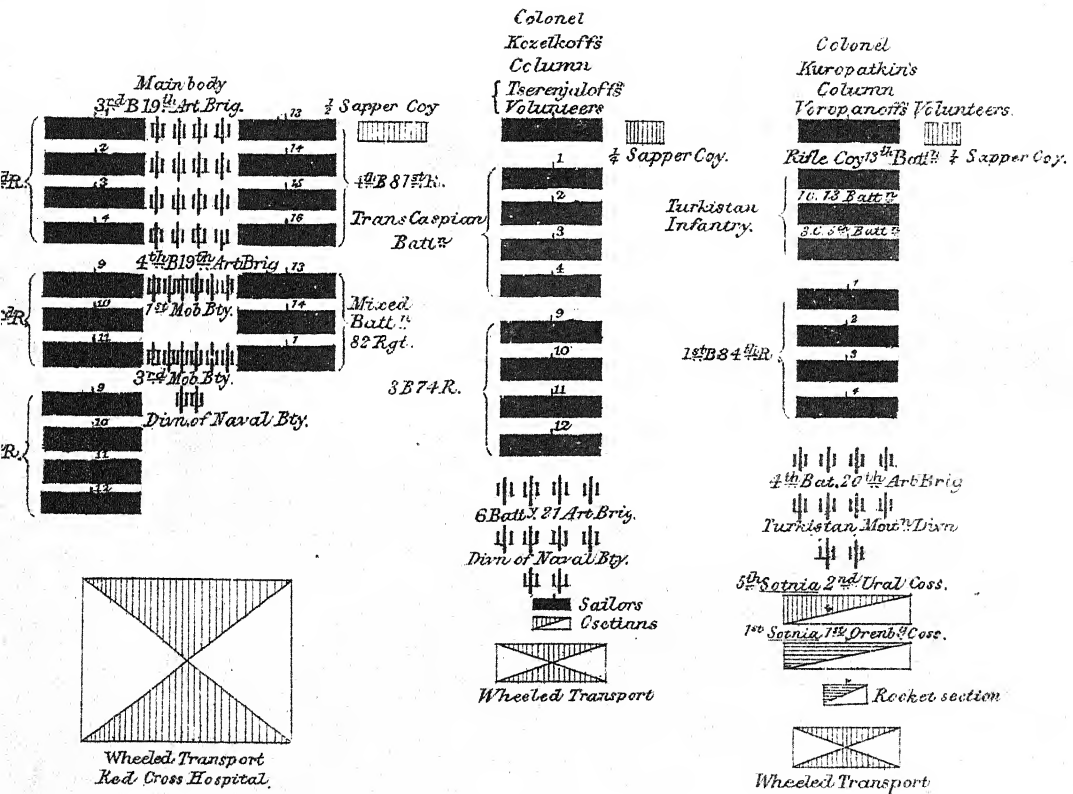
¶ General Order, Trans-Caspian Field Force, No. 548, dated 20th December 1880 (1st January 1881).—*Author*.

** General Order, No. 84.—*Author*.

RESERVE FORMATION

THE TROOPS OF THE AKHAL-TEKKE FORGE BEFORE THE STORMING OF YANGI-KALA

at 8 a.m., on the 20th December 1880 (1st January 1881).



Colonel Kozelkoff in the centre, and the main body on the left.* The Temporary Commander of the Troops inspected the whole force; then prayers were said, and at 8-30 A.M. Colonel Kuropátkin started in the direction laid down in orders, the remaining troops being halted to let this column get an advance on them. At 9-30 the whole moved off with bands playing, marching straight on Opornoye.

Directly our troops were drawn up in front of Sámurskoye, the Tekkes observed them, and at once the alarm gun sounded, and the defenders took their places.†

The village of Yangi-Kala, which lies on the right bank of the copious Sakiz-Yáb stream, consists of a group of kalas scattered irregularly among fields cut up into a large number of small sections by shallow canals and low mud walls, which appear in plan like a spider's-web, and which continue right up to the western face of Yangi-Kala. Somewhat apart from the main group and to the north were the kalas:—Kajar, known to us as Opornoye and Ogurli, called by us the cavalry kala. On the most westerly branch of the Sakiz-Yáb and above Opornoye were four mill dams, and a few more are found within the village. At this time all the fruit trees had been cut down for firewood by the defenders and for the construction of the underground dwellings for their families inside the fortress; but on the 6th (18th) July, when our troops had been at Yangi-Kala, they formed an almost continuous garden. A few trees were left on the dams. The ground in front of the west face was inundated in places, but this offered no obstacle to the advance of our troops.

From Opornoye to the southern face of Dangil-Tapa was about 1,850 yards of open ground cut up by four branches of the Sakiz-Yáb; and, as the enemy had no artillery, this space separated the defences of Yangi-Kala from those of the main fortress. The enemy, however, recognized this, and did not lay so much weight on the possession of Yangi-Kala after they had dug wells inside Dangil-Tapa, which gave abundance of good water. This was made evident by only 1,500 footmen, chosen from all four tribes, being placed in the village under Muhammad-Kuli-Khán. All the attention of the defenders was directed to holding Dangil-Tapa—a fact which was known to the Commander of the Expedition from information received from Russian agents in Persia; and not long before our attack on Yangi-Kala a Tekke prisoner had declared that “they had decided to defend Dangil-Tapa only.” The Tekkes, who, like all Central Asiatics, judged an enemy by the number of guns he had, estimated our force at 100 guns, according to the information received from the Gokláns and our *jigits*; but Taghma-Sirdár, to encourage the defenders, had said that we had only 12 guns, and that these were loaded so quickly, that they appeared to be more.

Colonel Kuropátkin formed an advanced guard of $3\frac{1}{4}$ companies, 2 guns, 2 *sotnias*, and 2 rocket-troughs,‡ under his own personal command, and, at 8-30 A.M., started along the foot of the hills for the south face of Yangi-Kala. The first objective of the advanced guard was the line of hills on the Sakiz-Yáb, 1,650 yards from the south-west angle of Yangi-Kala; and the occupation

* See sketch of “Reserve formation of the troops of the Akhál-Tekke Force” before the storming of Yangi-Kala at 8 A.M. on the 20th December 1880 (1st January 1881).—*Author*.

† See plan of the storming of Yangi-Kala on the 23th December 1880 (1st January 1881).—*Author*.

‡ The section of Sappers, the company of Volunteers, 2 companies 1st Shírván Regiment, 2 guns 4th Battery 20th Brigade, 1st *Sotnia* of 1st Orenburg and 5th *Sotnia* of 2nd Ural Cossacks, and the rocket section of the 1st Orenburg Cossacks.—*Author*.

of this position was effected under cover of the two *sotnias* with the rockets, who advanced to 800 or 900 yards from the western border of the village, which was strongly occupied by the enemy, dismounted, and opened fire. By their volleys and a few well-directed rockets they forced the enemy to evacuate the border nearest to them, and, after exchanging a few shots with the volunteers, the Tekkes abandoned the sandhills also. The advanced guard at once occupied them, and at noon two guns, covered by half a company, were brought into action on them, to fire on the southern face of Yangi-Kala and cover the passage of the column across the river. The remainder of the advanced guard crossed the stream, and advanced to occupy a second artillery position opposite the south front of the village, the two *sotnias* with the rockets being sent at a trot to cover the extreme right.

At this time the main body of Kuropátkin's column arrived at the river and crossed it, their left flank being covered by the advanced guard. A bridge had been thrown across the river, and ramps cut by Captain Yablochhoff of the Engineers; and by the former the artillery crossed, except the mountain division, which, on the first artillery position being occupied, had been brought up from the main body and sent to the other bank of the Sak z-Yáb to occupy a sandhill there, and open fire to cover the right of the advanced guard. The guns of this division were carried over the river by hand, and the ammunition boxes, &c., were taken over by a ford. As, however, the enemy had already been driven away by the cavalry on the right wing, and there were no objects for artillery to fire at, the division limbered up and moved after the Cossacks with half a company and a section of Ural Cossacks as an escort. At 12-45 P.M. 1½ companies of the Shirván Regiment and the company of volunteers occupied the second artillery position, from which a body of sharp-shooters furnished by volunteers was pushed forward to within 800 paces of the walls of Yangi-Kala.

At 1-15 P.M. six guns were brought up from the main body to this position, and were shortly afterwards joined by the division which had been left in the first position. On its left the battery was covered by two companies of the Shirván Regiment, and on the right by the volunteers and two companies of Turkistán troops brought up from the main body.

Two columns were then told off to storm Yangi-Kala. The left one, composed of two companies of the 1st Shirván Regiment under Lieutenant-Colonel Gogoberidze, was to capture the south-west face and the southern kala, and then advance to join Colonel Kozelkoff's column; while on the right, under Major Bogayevski, the volunteers, the Rifle Company of the 13th, and half of the 3rd Company of the 5th Turkistán Line Battalion, with two mountain guns, were to take the round tower, and then turn the village by its eastern side. Half of the company of volunteers was to keep up communication between the two columns. The two *sotnias*, with the rockets under Lieutenant-Colonel Gulyaef, were to advance on the right to threaten in flank the enemy, as he was holding the village against the storming columns. The reserve, consisting of 3½ companies, of which ½ company was told off to protect the bandaging station, was to follow the right column at 400 to 600 paces distance, according to the ground.

About 2 P.M., after the attack had been prepared by 10 guns, the columns advanced with bands playing, and the guns moved forward to a third position at close range and opened fire. The enemy, crushed by the fire of the artillery, and threatened in flank and rear by our cavalry, did not wait for our troops, but evacuated the village when the "attack" was sounded.

When the southern and part of the south-eastern side of the village had thus been taken, the battery began to advance by half batteries with the infantry towards the eastern face of Gok-Tapa in rear of Yangi-Kala, and fired at 1,850 to 2,800 yards at some masses of the enemy, which had been formed to cut off the retreat of our right flank column from the east, driving them back with a few well-aimed shrapnels into Gok-Tapa. At 3 P.M. Colonel Kuropátkin's column reached the cavalry kala, and opened communication with that of Colonel Kozelkoff.

The latter column and the main body had advanced, as has been mentioned above, at 9-30 A.M., and when on a level with the Mayáchnaya kala, which was occupied by the 5th *Sotnia* of Lába Cossacks, Colonel Kozelkoff's troops were deployed into order of battle. At 1,650 yards from Opornoye the mountain battery and two naval mitrailleuses were brought into action, and opened fire on Yangi-Kala and Opornoye. The main body and the cavalry halted on a spur on Kozelkoff's left flank, and shortly afterwards, to strengthen the fire of the artillery and to make a breach in Opornoye, the 1st and 3rd Mobile Batteries (12 4-pounder guns) were brought into action, thus bringing the number of guns in line in this part of the field up to 22. For two hours the bombardment of Yangi-Kala continued, the batteries sometimes changing position, moving forward by half batteries, the last position being at 350 yards from the village. This fire, and that of Kuropátkin's column from the south, greatly weakened the fire of the enemy, who began to evacuate Yangi-Kala and Opornoye, pouring singly and in groups into Dangil-Tapa, and sheltering themselves from our fire in the western branch of the Sakiz-Yáb.

At about 3 P.M. the Trans-Caspian Local Battalion and the 3rd Stavropol Regiment advanced to attack Opornoye, and at the same time the division of Taman Cossacks under their commander, Colonel Artsishevski, attacked the footmen, who were retiring from Yangi-Kala into the fortress. This division killed many of the enemy lying along the river bank, and then dismounted and opened fire upon those who had escaped. At this time the enemy came out from Dangil-Tapa in large masses with the evident intention of making an attack, so the Taman *sotnias* were recalled, and the 3rd and 4th Batteries of the 19th Brigade were brought into action facing Dangil-Tapa. Fire was then opened on the footmen debouching from the fortress and on the Mill-Kala, from which the enemy had commenced a heavy fire.

On Opornoye being captured, the Trans-Caspian Battalion and 3rd Stavropol Regiment brought their right shoulders forward, drew up opposite the southern front of Dangil-Tapa, and began to fire volleys. Under the protection of these troops, and that of the batteries of the 19th Brigade, a bridge was thrown across the stream, storming ladders being used in its construction. In half an hour it was ready, and all the troops crossed by it. The enemy withdrew into the fortress, and our skirmishers kept up a dropping fire with a few groups of the enemy.

Both columns on uniting were drawn up at 1,850 yards from the wall of the fortress, between the two middle branches of the Sakiz-Yáb, and the camp was at once fortified. The artillery occupied the front, Kuropátkin's and Kozelkoff's columns the flanks, and the infantry of the main body, the baggage, parks, and hospital encamped in rear of the artillery, the cavalry occupying a separate camp on the right flank. To cover the flanks, the Opornoye and cavalry kalas were occupied, as also three kalas to cover the rear. All were put in a state of defence, and a heliograph station was established in Opornoye and brought into communication with Sámurskoye. Our losses at the

capture of Yangi-Kala were 1 man killed, 10 men wounded, and 5 contused, and 9 horses killed and 10 wounded.*

The firing in the outpost line went on all night. Next day, the 21st December (2nd January 1881), all the wheeled transport left camp for Sámurskoye, together with detachments of artillery, to bring up the baggage and guns left there (except 6 guns required as armament), under escort of the 3rd Shirván Regiment, 2 mountain guns, and a *solnia* of the 5th Orenburg Cossacks, the whole being commanded by Lieutenant-Colonel Shkurkin.

On this day it was resolved to make a reconnaissance of the eastern and northern faces of the fortress, and for this a column under General Petrusévitch was detailed, consisting of the division of Dragoons, the 1st and 3rd *solnias* of Taman, the 2nd of Poltáva, and the 5th of Iába Cossacks, and the Horse Mountain Division. After marching round the fortress, it had orders to proceed to Sámurskoye, join Shkurkin's column, and escort the camel and wheeled transport with 15 days' provisions and other baggage back to camp. With the cavalry column marched Lieutenant-Colonel Rutkovski, the Commanding Engineer of the Force, and two topographical officers.

General Petrusévitch's column started at 7-30 A.M., and marched between the Grand Duke's and Olga kalas, past the right flank kala, and round the north of Petrusévitch's garden to the cemetery opposite the north-west angle of Dangil-Tapa.† While passing along the north front of the fortress, Petrusévitch sent the two Taman *solnias* to examine old Gek-Tapa. Masses of the enemy's horse and foot came out from Dangil-Tapa on to the route followed by the cavalry, and there was a sharp fight north of the fortress. Concluding from the repeated volleys of, apparently, dismounted cavalry that Petrusévitch had been attacked by superior forces of the enemy, General Skob. leff left camp at noon with the 1st Sámur Regiment, the 3rd Battery 19th Brigade, and the 1st *Solnia* 1st Orenburg Cossacks to support the cavalry and draw off the enemy from it. This column was halted on a level with the hill of Dangil-Tapa, and the battery opened fire at 1,400 yards on the interior of the fortress. At 2 P.M. the forces were united near the cemetery, whence the cavalry proceeded towards Sámurskoye, while the troops which had come out to its assistance returned to camp. Our loss was 1 man killed and 5 wounded. During the march Rutkovski had observed the eastern and northern faces of the fortress, and the topographers had made a sketch.

On the 22nd December 1880 (3rd January 1881), the troops sent out the previous day returned to Sámurskoye; and with them came the 11th and 12th Companies Apsheron Regiment, the half Mortar Battery, one Engstrem gun, two guns of the half battery of the 1st Battery 21st Brigade, and the 2nd Mobile Battery (7 9-pounder guns). On 1,100 of Gromoff's camels, 600 camels belonging to the Turkistán force, and the waggons of the wheeled transport were brought up 15 days' supplies and the troops' baggage (including *yulameikas*), dynamite, pyr-oxylene mines, engineering tools, and the divisional hospital of the 21st Division.‡ The cavalry, which had gone to Sámurskoye, received there 6·9 lbs. of oats per horse; but after that from the 22nd December 1880 (3rd January

* There were expended 6 rounds per infantry and 7 per cavalry rifle and 100 per mitrailleuse. The artillery fired 8 rounds per gun (Colonel Kuropatkin's Report to the Temporary Commander of the Troops, No. 156, dated 31st December 1880 (12th January 1881); Staff Diary of Field Operations for December 1880; Colonel Verbitski's Report on the movements of the artillery at the capture of Yangi-Kala).—*Author*.

† See sketch of the reconnaissance of Dangil-Tapa on the 21st December 1880 (2nd January 1881).—*Author*.

‡ General Order to the Troops, No. 85.—*Author*.

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† See sketch of the reconnaissance of Dangil-Tapa on the 21st December 1880 (2nd January 1881).—*Author*.

‡ General Order to the Troops, No. 85.—*Author*.

RECONNAISSANCE OF DANGIL-TAPA

on the 21st December 1880 (2nd January 1881).

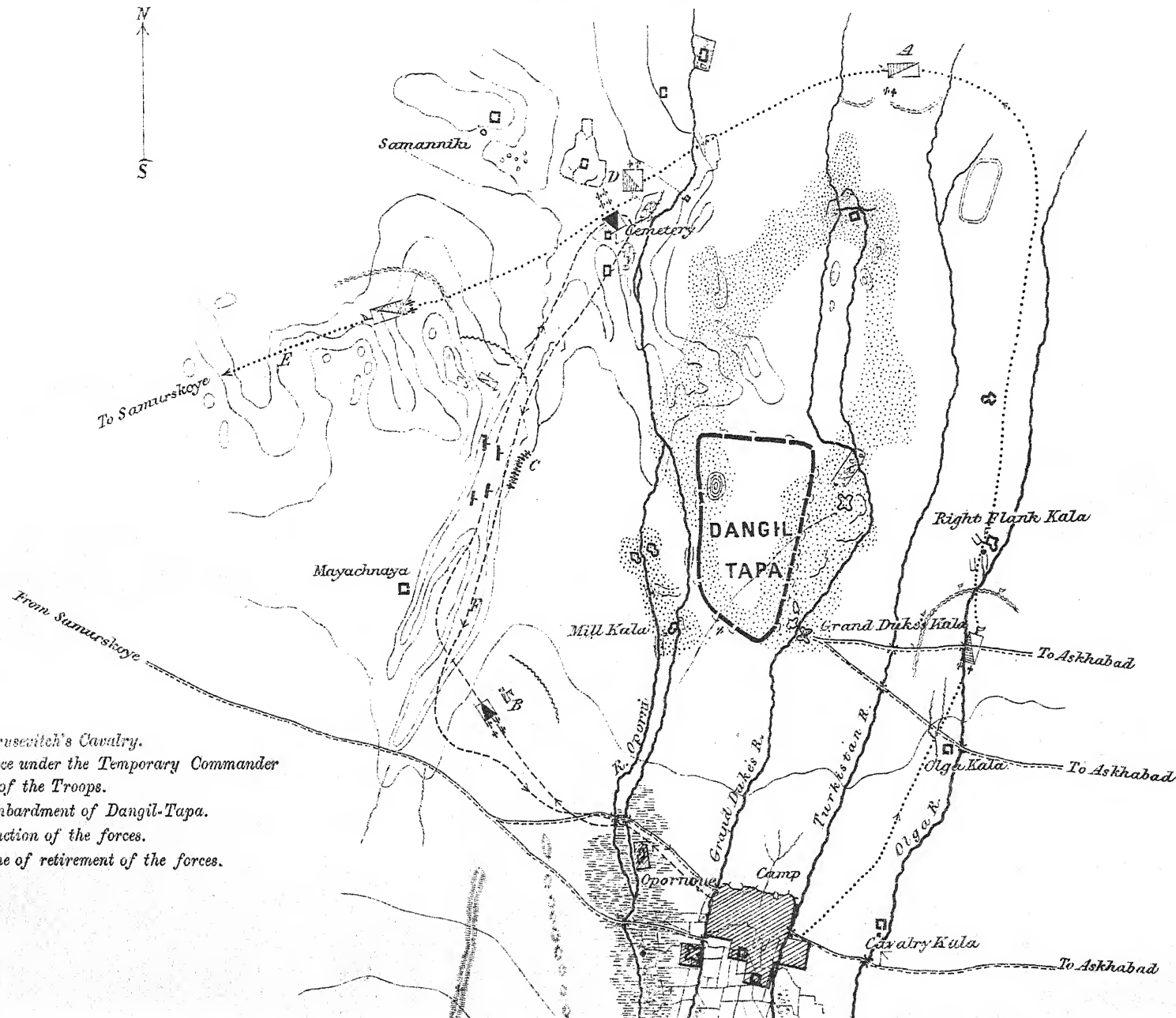
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- A. Petrusvitch's Cavalry.
- B. Force under the Temporary Commander of the Troops.
- C. Bombardment of Dangil-Tapa.
- D. Junction of the forces.
- E. Line of retirement of the forces.

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1881) to the 19th (31st) January 1881, the cavalry horses were supplied entirely by foraging.

On the evening of the 22nd December 1880 (3rd January 1881), a large town of *yulameikas* and *kibitkas* rose before the hostile fortress; and, apparently, this impressed the enemy with the idea that we had come to stay there, and not merely to make a raid, as in August 1879 and July 1880.

On the 22nd December 1880 (3rd January 1881), Colonel Kuropátkin was ordered to capture the right flank kala, put it in a state of defence, and bring water to it. The occupation of this kala was considered especially important, to secure the right flank of the siege works, which would be at some distance from the camp, and it was also of use for investing purposes, as it was on the Askhábád road. To carry out a reconnaissance of the ground in front of the camp of the main body on the Askhábád road, and to fix upon a new camping ground for the cavalry near the desert (so that they might be ready at any moment to fall upon the enemy, should he leave the fortress), the Chief of the Staff and the Commanding Engineer, with the topographical officers, marched with the force told off to carry the right flank kala.* General Skobelev himself on this day reconnoitred the south face.

The force, which consisted of 2½ companies, 1 *sotnia*, and 4 guns,† occupied the kala without resistance at 8 A.M., and at once proceeded to put it in a state of defence, and to place a heliograph on its tower. Lieutenant-Colonel Gogoberidze was named its commandant.

Colonel Kuropátkin had next to move towards the north into the desert to examine the Jula-Kala, which was afterwards named "Petrúsevitch's Garden," in memory of the death of that General in it on the 23rd December 1880 (4th January 1881). As the Jula-Kala was 1,850 yards from the right flank kala, and only 1,400 from the north-east angle of the fortress, Kuropátkin sent a heliographic message to camp asking to be reinforced by the 1st *Sotnia* 1st Orenburg Cossacks with the two rocket troughs, and by half of the 1st Company 13th Turkistán Line Battalion from the Olga-Kala, which had been occupied by us since the 21st December 1880 (2nd January 1881). To prepare the attack, the two field guns in the right flank kala were directed to fire on the Jula-Kala.

Before the arrival of the troops sent for, Kuropátkin advanced from the kala with a company and a *sotnia*, leaving orders that on the arrival of the Orenburg *sotnia* with the rocket section and the half company of the 13th Battalion they were to be sent after him. On reaching an earthen bank 700 yards from the Jula-Kala, Kuropátkin sent the company straight forward, and the *sotnia* to turn the left flank of the enemy. The infantry, advancing to within good rifle range, established themselves behind some mud walls; and, to prepare the attack, fired volleys, which, together with the well-directed fire of the guns from the right flank kala, made the defenders of the Jula-Kala waver. On the arrival of the reinforcements, the infantry advanced, firing, while the Orenburg and Ural *sotnia* galloped round the left flank of the enemy to the north of the kala. The Tekkes thereupon retired, and the kala and garden were occupied, large stores of barley, wheat, *jowár*, and lucerne being found in it.

When the foraging was ended and the retreat had begun, bodies of the enemy's cavalry came out from the northern gates of the fortress, and advanced to attack the right flank and rear of the force; but the retirement was

* Circular to the troops, No. 86, dated 21st December 1880 (2nd January 1881).—*Author*.

† 2 companies 1st Shirván Regiment, ½ company Sappers, 2 guns 1st Mobile Battery, 2 naval mitrailleuses, and the 5th *Sotnia* 2nd Ural Cossacks.—*Author*.

conducted in perfect order, the fire of the infantry protecting the withdrawal of the cavalry, while that of the dismounted skirmishes of the cavalry and the rockets covered the retirement of the infantry. At 2 P.M. the troops reached the right flank kala, having lost 2 men killed and 2 officers (Lieutenant-Colonel Gogoberidze and Lieutenant of Cossacks Krementsoff) and 5 men wounded.

After this affair a reconnaissance of the ground in front of the eastern front was made by General Grodekoff, Lieutenant-Colonel Rutkovski, Captain Yablochkoff of the Engineers, and several men; the lines for the first parallel were chosen; the prolongation of the south front of the fortress was laid down, and a place for the first siege battery to enfilade this front marked out. In the meantime the direction of the first parallel against the south front had been determined by a reconnaissance made by General Skobeleff in person. The 23rd December 1880 (1st January 1881) was fixed upon as the day for opening the trenches.

CHAPTER XV.

Proposals of General Skobelev in September 1880 as to the method of capturing Dangil-Tapa—His opinion on artillery—Plan of the attack on Dangil-Tapa drawn up after the reconnaissances of the enemy's position in December—Final choice of a front attack—Opening of the first parallel—General Skobelev's orders regarding the siege works—First period of the siege up to the capture of the Grand Duke's Kala—Occupation of this position—State of affairs on 1st (13th) January 1881—Advance of the right attack—Mining operations—Construction of a breaching battery preparatory to the storming—Armistice—Storming of the fortress on the 12th (24th) January 1881.

On his arrival at Chikishliar in the beginning of May, the Commander of the Expedition requested Colonel Rutkovski, the Commanding Engineer, to draw up a plan of Gok-Tapa based on his personal recollections of it on the 28th August (9th September) 1879, supplemented by any other information he could gather; and he also desired him to give the subject his special attention. He several times mentioned that, during the Khokand Campaign of 1876, it had been decided to advance on Andiján, and that a plan of that town made by *Yesaul* Baitokoff from his recollections of it in 1875 proved very accurate, and was of great use to him.

The information brought into Chikishliar in May as to the works which had been carried on at Gok-Tapa was very much exaggerated. The scouts' tales were quite extraordinary. For instance, they said that a wall had been built round the hill of Dangil-Tapa on which eight horsemen could ride abreast; that this wall had been made so that the Russians might not be able to batter it down with their artillery; and that it was proposed to make it 140 feet high. "We must put all the appliances of artillery science into force to breach this wall," said General Skobelev on the 12th (24th) May at Chikishliar. General Zinovieff* is the only man who has done this in all our Central Asiatic warfare, but he was a Professor of Gunnery, and we have no one to replace him. The artillery officers must learn how to do it. I shall set them some problems."

Petin's escape from captivity, and the arrival in our camp of Muhammad-Ali-At-Muhammad-Ogli of Kára-Kala, considerably facilitated Rutkovski's task of drawing up a plan, for Petin made at Bámi a clay model of Dangil-Tapa. He himself had seen how the fortress was built, and how first an earthen bank was thrown up and trodden hard by men and horses, and how it was then covered with a coating of mud 5 feet thick, so that the whole was very firm. The reconnaissance of the 6th (18th) July had shown the whole of the defensive strength of Gok-Tapa. We have seen, too, how the results of this reconnaissance induced General Skobelev to ask for a reinforcement of his artillery, especially in mortars, and for mining appliances to be sent.

General Kaufmann's warning that if Gok-Tapa were not taken in 1880, the winter would be a time of troubles in Turkistán; Ambassador Zinovieff's representations that our political interests demanded a speedy and firm consolidation of our power in the Akhál oasis; the presumption of China, to whom our difficulties in Turkumania were very pleasing; Roberts' victorious campaign; and, finally, the danger that the longer the operations lasted the more frequent would be the attacks on the lines of communication—all these caused

* Now Major-General and Commander of the Guard and Grenadier Artillery Brigade.—*Author.*

General Skobelev to consider in the end of July whether a sudden dash might not be made at Gok-Tapa with the troops then in the country. These calculations were as follows. If the last battalion, 3rd Apsheron Regiment, of the troops of the 21st Infantry Division detailed for the campaign were brought over to Trans-Caspia, then, after leaving two mobilized battalions (1st Daghistán and 3rd Apsheron Regiments) on the Atrak line, and three companies of the 1st Shirván Regiment and two of the Railway Battalion on the Micháelovsk line, there would remain for operations against Gok-Tapa the 4th Apsheron Regiment, 1st and 3rd Sámur Regiment, 3rd Shirván Regiment, and 4th Daghistán Regiment, 1 company 1st Shirván Regiment, 1 Sapper company, 2 companies of the Krásnovodsk Local Battalion, and 1 of the Alexandróvsk Local Detachment,—in all 2,700 bayonets. Then 600 rifles* might be counted upon from the Cossacks and 50 guns. With the 4,000 camels then at our disposal, 9,600 cwt. of stores (1½ months' supplies for the force) could be taken, together with infantry and artillery ammunition; and it was proposed to advance upon Gok-Tapa and storm it after a bombardment. As the infantry and dismounted Cossacks were few in numbers, the whole success of the project depended upon the artillery, against which the Tekkes would not hold out for any prolonged time.

General Skobelev was, however, doubtful whether the artillery could do it. It has been stated above that General Skobelev's plan, as arranged at St. Petersburg, was to mass 100 guns before Gok-Tapa. He required this large proportion of artillery because Asiatics reckon the power of an army by the number of *tops* (guns) it possesses; and he hoped to impose on the imaginations of the Tekkes by a great display of force in this respect. He always said, too, that it was necessary to be very careful in forming projects based on the effects of artillery fire to any considerable degree. This he had learned from his rich store of experience; for on the night of the 28th and 29th May (9th and 10th June) 1873 four 18-lb. mortars, placed at 470 yards from the town wall, had played upon the thickly-populated quarters of Khiva, and had produced a great impression, which contributed not a little to the unconditional surrender of the town. Here, therefore, artillery had been of considerable use. After the repulse of the attack on Andiján on the 1st (13th) October 1875, our troops tried to turn the affair to their own advantage by a heavy bombardment of the town and bázár, and about 500 rounds of case and 4-pounder common shell were fired against the closely packed masses of the enemy; but the *morale* of the latter stood very high, and the artillery was powerless. On the 22nd August (3rd September) 1875, before Makhrán, the unexpected appearance of 24 guns on the flank of the enemy's masses and a few well-aimed rounds were sufficient to disperse the enemy and give us the victory, 58 guns and 40 standards falling into our hands. At the storming of Nármangán, on the 27th October (8th November) 1875, our losses had reached 100 men before the artillery came into action with great decision. From that moment the capture of the town cost us 800 shell, but not a single life. Apparently on this occasion the artillery produced a great moral impression, and decided the action. Again, at the storming of Andiján on the 8th (20th) January 1876, our artillery fire secured us the initiative, and enabled us to succeed with small losses. The second storming of Andiján cost us 2,300 shot and shell. Before Lovcha on the 22nd August (3rd September) 1877, when the Kazán Regiment had taken the Red Hill, our batteries advanced to close

* Rifles are here counted, not sabres, as the Cossacks were meant to form part of the storming columns. *Author.*

range, and fired "case shell" at the interior of the Turkish Central Redoubt. Although we did not get all the advantages of our commanding position, as the redoubt was well defiled, still the effect of this mass of guns was terrible. The attack on the redoubt, however, made after a bombardment of two hours, shewed that the resistance of the enemy had not been broken by the artillery fire, and the capture of the work cost us 1,000 killed and wounded in half an hour. Thus the very heaviest fire in this case did not have the expected effect, for the *morale* of the enemy stood high after their victories at Plevna, Yeni-Zágra, and Yeski-Zágra, and after the hasty retreat of the Russians over the Balkáns. Presuming on the impression produced by the bombardment of Plevna between the 25th to the 30th August (6th to the 11th September), it was resolved to storm the place, but the miscalculation of the effects of artillery fire cost us a defeat, with a loss of 18,000 men. On the 8th (20th) June 1874, Marshal Conchi's army before Estella met with the same experience.

All this led General Skobelev to the conclusion that, while it was necessary to provide ourselves with powerful artillery appliances, it was dangerous, both for himself and for the troops, to trust too much to its magical action, or to impress this idea in the minds of the men.* He, therefore, gave up the idea of making a dash at Gok Tapa with the greater part of the force concentrated in August on the east coast of the Caspian, and from that time all our exertions were directed towards organizing the lines of communication and the convoys.† "A miss-fire before Gok-Tapa would be a crime, and, therefore, I will assuredly make certain of everything," said General Skobelev.

The reconnaissance of the 6th (18th) July had undoubtedly shewn that our undertaking against Gok-Tapa would be of the most serious description, and that the (accelerated) attack must come from the side of the hills through Yangi-Kala, as from it we had a road to Persia, where our supply-depôts were. There, too, we should have ample supplies of water, and should also be upon the enemy's line of retreat on Ashkábád. The general idea of the attack on Gok-Tapa, as explained by General Skobelev at Krásnovodsk on the 25th September (7th October) after the experience of the 6th (18th) July, was to be as follows:—

On the arrival of the troops before Gok-Tapa, the camp was to be fortified, as also the defiles through which the Sakiz-Yáb, which brought water to the fortress, flowed. The cavalry was to be sent on to the Ashkábád road to the rear of Dangil-Tapa. Parallels and batteries were to be opened against Yangi-Kala, and it was to be bombarded from the first position; and then a second parallel with a breaching battery was to be constructed, and the place again bombarded. Yangi-Kala was then to be stormed, and the side facing Dangil-Tapa fortified. Parallels and batteries were then to be opened against Dangil-Tapa, and the place finally bombarded and stormed.‡

The December reconnaissances greatly increased our knowledge of the ground round Gok-Tapa; and the result of them was the construction of a plan of Dangil-Tapa and of Yangi-Kala and their environs on a scale of 1,750 feet to the inch. This was issued to the troops on the 20th December 1880 (1st January 1881), before the attack on Yangi-Kala. Notwithstanding the

* Diary of the Staff of the Trans-Caspian Field Force, 1st Section, 1880, No. 8, Part II.—*Author*.

† General Skobelev's letter to the War Minister, No. 3, dated 24th September (6th October) 1880.—*Author*.

‡ Diary of the 1st Section of the Staff of the Trans-Caspian Field Force, 1880, No. 8, Part II, page 38.—*Author*.

care taken in the reconnaissances, many important points occupied by the enemy, and which in consequence ought to have been shown, were omitted or wrongly placed on the plan, such as the Grand Duke's Kala position, which played such an important rôle in the siege.

On this basis Lieutenant-Colonel Rutkovski worked out his plan for the siege of Dangil-Tapa as shewn in this map, and drew up the following memorandum :—* The attack should be directed from the direction of Askhabád, and its object should be the sharp south-eastern angle of the fortress, for which purpose the *aul* of Yangi-Kala should be first occupied and a demonstration made against Dangil-Tapa. After its occupation Yangi-Kala should be fortified, taking advantage of the walls and buildings of the *aul*, and its defence should be based on the powerful mutual support of the salients of the defensive line. In rear the field of fire should be cleared of obstacles for 350 feet from the edge of the village. A bandaging station should be established in the *aul*, as also a supply dépôt, artillery park, &c.

As soon as the camp is occupied, a detached redoubt should be constructed in advance of its left flank, advantage being taken of the Opornoye Kala, which here forms a salient from the village. In it should be placed the engineer and advanced artillery parks. The construction of the entrenched camp should be completed in three days.

On the night of the third day, the attack upon Dangil-Tapa should be begun by the construction of (1) batteries for enfilade and reverse fire, each of 14 guns, at a distance of 1,163 yards (500 *sázens*) from the attacked front,† with lodgments on their flanks for their covering parties of 933 yards (400 *sázens*) crest line,‡ and (2) a redoubt of field profile on the right flank for a company and two guns.§ The batteries and redoubt should be ready for action and armed in a night, and the lodgments made so far as to cover the men occupying them. Next day the lodgments should be widened and the batteries and redoubt finished. Fortified points should be established to connect the batteries with the camp. During the *first night* the reserve should be posted behind the Olga Kala, which should be prepared for artillery and small-arm defence.

2nd night.—Communications should be constructed to the Grand Duke's Kala, which should be occupied and placed in a state of defence. In front of it a mortar battery should be constructed.|| During the night these works should be so far finished as to cover men and guns, whilst by day the communications can be widened for the passage of guns.

3rd night.—The second parallel should be opened in front of the Grand Duke's Kala at 583 yards (250 *sázens*) from the wall of the fortress, and batteries¶ for 4-pr. guns to fire upon the parapet walls and prevent the enemy from holding them and lodgments for their covering parties constructed.** By day the parallel should be widened.

4th night.—The third parallel should be opened at 233 yards (100 *sázens*) from the attacked works. It should be 1,400 yards long with a place of arms for storming columns, and at its angles barbettes for light guns to fire on the

* See plan of the environs of Dangil-Tapa and Yangi Kala made after the reconnaissances of 6th (18th) July and 4th (16th), 11th (23rd), and 12th (24th) December.—*Author*.

† Elevated battery with Prussian pattern embrasures. A working party of 480 men would be required for the night.—*Author*.

‡ Six hundred men would be required for the construction of 730 yards (400 *sázens*) of lodgment.—*Author*.

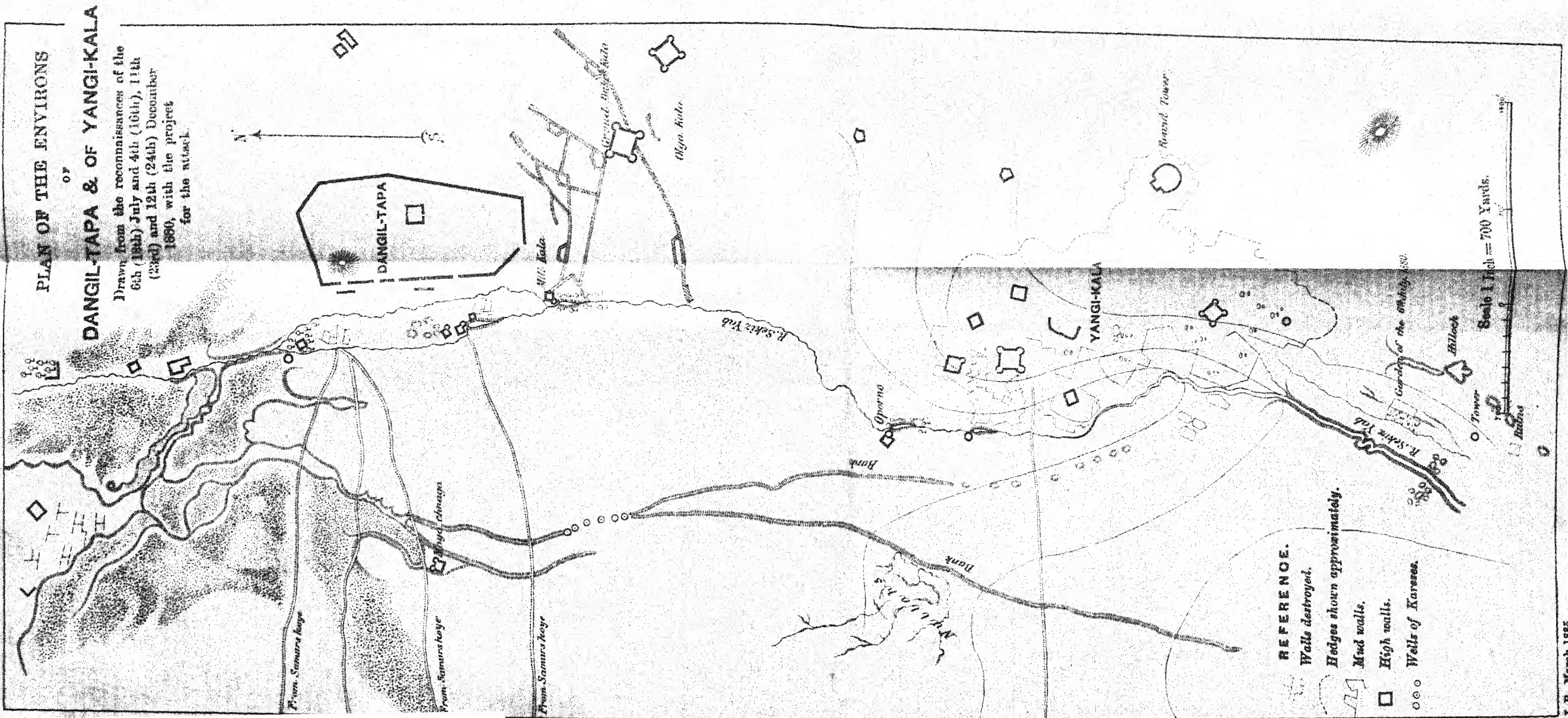
§ Two hundred and fifty workmen would be required for this.—*Author*.

|| Working party of 1,200 men would be required.—*Author*.

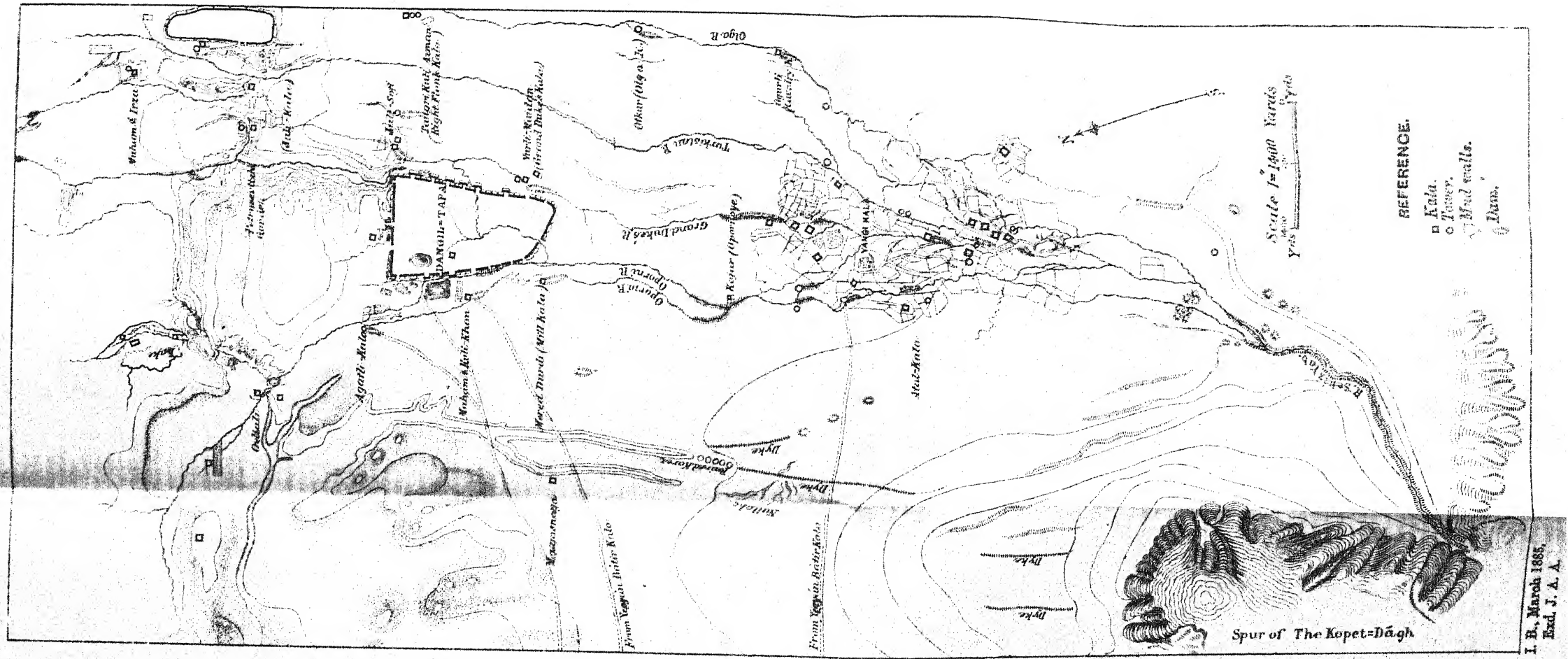
¶ Sunken batteries.—*Author*.

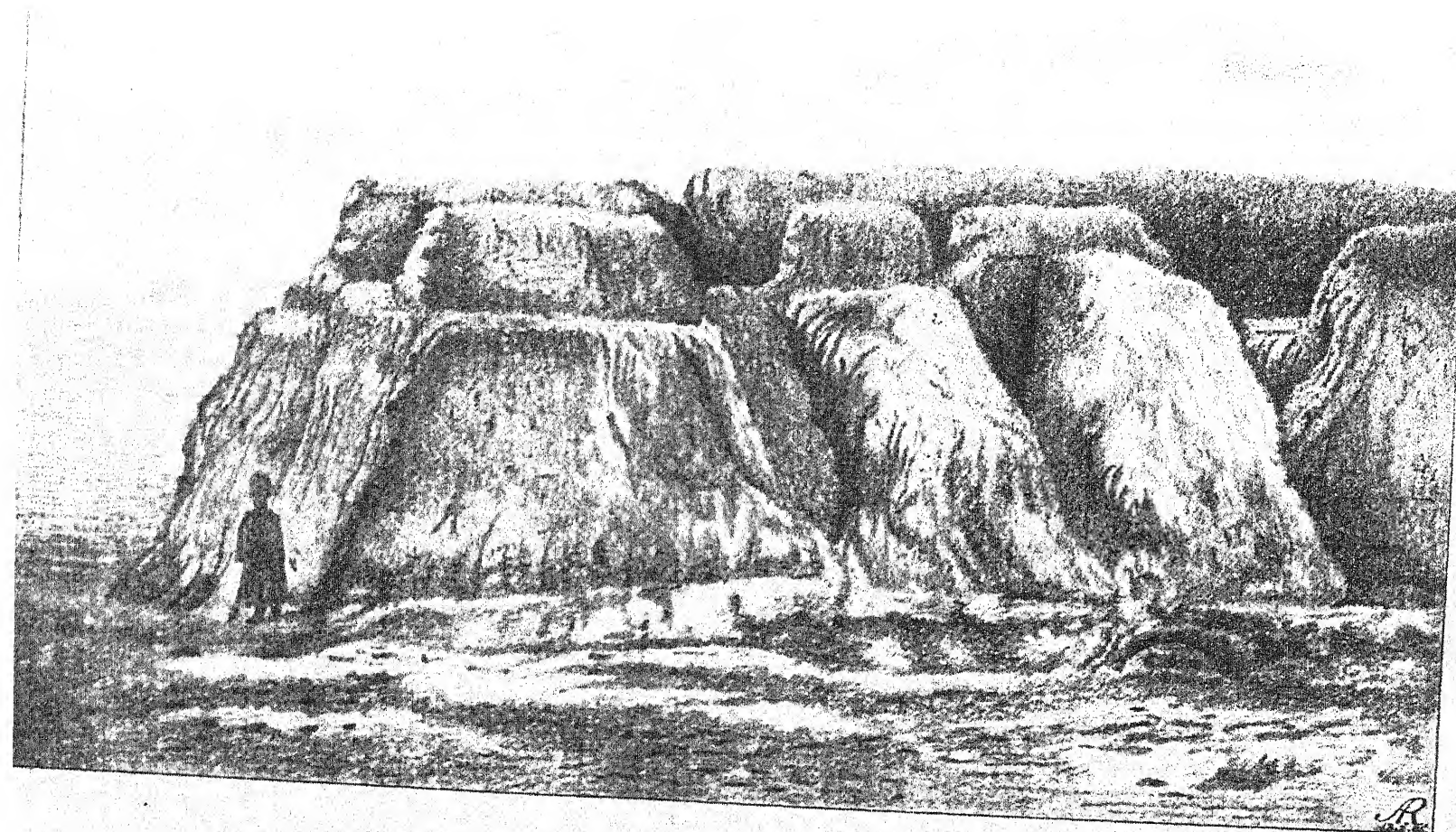
** Working party of 1,290 men.—*Author*.





PLAN OF THE ENVIRONS
OF
DANGIL-TAPA AND YANGI-KALA,
Surveyed with Instruments in 1881.





VIEW OF THE WALL OF DANGIL-TAPA FROM THE INTERIOR.

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gates, oppose sorties of the enemy, and for general purposes should be made.* By day the trenches should be widened, and communications made between the Mill Kala and the second parallel.

5th night.—The closer approaches should be begun, and lodgments made for detachments of riflemen and light guns to cover the approaches towards the ditch. The latter should be at 117 yards (50 *sâjens*) from the wall. Before dawn the detachments of volunteers and miners should descend into the ditch with sandbags, tools, and mining materials, and make lodgments and blindages in it, while the miners should drive a gallery under the wall, construct powder-chambers in the scarp and counterscarp,† and load them. About four hours would be required for this work. Then the explosion would take place, and a salvo would be fired from all the guns on the breaches, three of which should be made at different points. After the salvo, the storming columns should at once rush up the breach, closely followed by working parties, with sandbags, gabions, and entrenching tools, to construct lodgments and batteries on the ramparts to fire on the interior of the fortress.

As mining operations in the ditch would be very dangerous, and, if powder were used, would take up a great deal of time, the Commander of the Expedition expressed a wish to use dynamite for this purpose, as it occupies much less space and saves the miners much work. As, however, dynamite had never been tried upon mud walls, he gave orders to have experiments made at Sámurskoye on the walls of kalas. The result of these experiments was that dynamite was found unsuitable for such operations, and it was, therefore, decided to use powder.‡ This circumstance caused the opinion to be formed in Sámurskoye, that it would be impossible to place mines as was proposed by Rutkovski, but that a gallery would have to be begun from in front of the counterscarp.

Dangil-Tapa consisted§ of a four-sided enclosure of irregular form. The length of its west side was 1,575 yards, of its north side 980 yards, east side 1,680 yards, and south side 560 yards, the total perimeter being 2 miles 1,275 yards. There were three gates in the north face, nine in the west, one in the south, and eight in the east face, some of them being covered on the outside by large semi-circular traverses, which afforded a certain amount of flank defence to the ditch. The breadth of these entrances varied from 7 to 14 feet. The ditch was from 6 to 9 feet deep, with rifle pits and steps dug out of the counterscarp in places, the average breadth being 12 to 17 feet.

The wall, which consisted of an earthen rampart covered with a layer of clay, rose without a berm from the ditch, and had a command of 14 feet. Behind it was a very irregular interior trench consisting of a row of pits, but with about the same average dimensions as the ditch. The thickness of the rampart at the base was 35 feet, and at the top from 21 to 28 feet. It was everywhere furnished with inner and outer breast-high parapets, with a large number of traverses right across the *terre-plein* of the rampart. The inner parapet was meant to resist an attack from the rear, if the enemy succeeded in penetrating into the fortress; and the traverses were designed to facilitate a step-by-step defence of the rampart, as in all Central Asian fortresses, and were provided with loopholes.

* Working party of 900 men.—*Author.*

† The counterscarp was to be blown down to facilitate the descent into the ditch.—*Author.*

‡ In Appendix No. 75, see Account of the experiments carried out by the 3rd Company of the 2nd Caucasus Sapper Battalion in camp Sámurskoye.—*Author.*

§ See plan of Fort Dangil-Tapa surveyed instrumentally in 1881 on a scale of 700 yards to the inch.—*Author.*

The interior of Dangil-Tapa was quite level, with the exception of an artificial hillock 49 feet high in the north-west angle; and a little to the south of the latter was a small kala. In the north-east angle wells had been dug, which furnished abundance of fresh water. The *terre-plein* of the fortress was thickly covered with *k-bitkas*, about 13,000 in all, and a broad open space ran down the centre from north to south.

In front of the western face of the fortress, and not far from the scene of our attack in 1879, strong trenches had been thrown up on a group of hillocks; and when our force took up its position before Dangil-Tapa, the defenders made a trench under our very eyes, 210 yards in front of the south face and parallel to it, with two communications leading from the ditch—one near the south-east angle, 77 yards long, and ending in a semi-circular trench, called by us the "horse-shoe trench"; the other almost in the centre of the south front from a salient angle of the wall, called by us the "ice-cutter," 233 yards long, and ending in a redoubt of strong profile.

In the immediate neighbourhood of the fortress were several kalas, or fortified enclosures, with mud walls as much as 18 feet high and 4 feet thick with towers at the angles, such as the Mill, Opornoye, Olga, Grand Duke's (Main, Volunteers', and Turkistan), Right Flank, and Cavalry kalas, and Petrusévitch's garden, &c. Of these, the Mill, Right Flank, and Grand Duke's kalas played an important part in the siege. In their interior, as a rule, pits had been dug for keeping corn and *saman*. The towers at the angles had the form of truncated cones, their height being usually equal to that of the wall and parapet. Round the kalas were fields, crossed in different directions by mud walls from 2½ to 4 feet high and 2 feet thick.

The ground round the fortress and between the kalas was almost flat, the undulations being very slight, and was covered with ploughed fields, which at the time of the arrival of our troops were devoid of vegetation.* Trees were found in small groups round the kalas and dams. The soil was clay and was turned by rain into sticky mud, so it could only be classed as tolerably favourable for siege works.

The reconnaissance of the 22nd December 1880 (3rd January 1881) shewed that an attack on the capital of the south-east angle of Dangil-Tapa was the most favourable for the following reasons:—(1) This angle was more acute than the others, which permitted of the southern and eastern faces being brought under reverse and enfilade fire without extending the siege works much; (2) the ground opposite the south face had such a command over the fortress that the latter was run into, while to the east of Dangil-Tapa the ground sloped down from the fortress, and the ramparts concealed the interior; (3) the direction of the nullahs and watercourses permitted of their being made use of as communications between the camp and the trenches, thus lessening the amount of work; and (4) parts of the east front were evidently weak, as they consisted of a high mud wall with many cracks and holes in it.

On the 22nd December 1880 (3rd January 1881), the Commander of the Expedition assembled Colonels Kozelkoff and Kuropátkin, the officers named to command the left and right attacks, and the heads of departments; and it was then resolved to leave the camp in its original position, as it was on our line of communication with Sámurskoye and close to Yangi-Kala, whence building materials could be obtained, and where there were buildings which would serve as store-houses. The operations for the following week were then agreed upon,

* In Appendix No. 76, see a reference as to the influence of this circumstance on the demand for sandbags.—*Author*.

viz., to begin the siege, on the 23rd December 1880 (4th January 1881), by opening the first parallel and constructing two batteries to enfilade the south and east fronts; on the 24th December 1880 (5th January 1881), to form the second parallel; on the 25th and 26th December 1880 (6th and 7th January 1881), to finish all the above works, reconnoitre, and construct a mortar battery to fire against the Grand Duke's position; on the 27th December 1880 (8th January 1881), to storm this position; and on the 28th and 29th December 1880 (9th and 10th January 1881), to establish ourselves securely in the Grand Duke's *kalas*. From the 25th to the 29th December 1880 (6th to 10th January 1881), the left flank was also to be gradually pushed forward.

To carry out the siege works, on the 23rd December 1880 (4th January 1881), 12 companies,* or 1,250 men, were placed at Rutkovski's disposal. Up till the capture of the Grand Duke's position the artillery could only play a very subordinate part in the siege, and was to be mostly kept in reserve in camp for the following reasons:—In the park there were 72 rounds per heavy, 220 per light new pattern gun, 172 per 9-pounder, 450 per 4-pounder, and 300 per mountain gun, and 1,000 mortar shells,—in all 16,100 rounds. Besides these, 4,000 rounds were expected with the 45th Divisional Ammunition Column and with the ten mortars, which were now being sent up the Micháelovsk and Atrak lines. On their arrival the number of rounds would reach 20,000. General Skobeleff, who thought that, after the capture of Dangil-Tapa, it would be necessary to dislodge the Tekkes from a new centre of resistance at Askhábád, decided that only 36 rounds per heavy (144), 110 per light gun (2,640), 100 per 9-pounder (700), 300 per 4-pounder (3,600), and 150 per mountain gun (1,500), in all 8,584 rounds, besides 4,000 mortar shells, should be expended before Gok-Tapa. Thus we had only 12,500 rounds to count upon, and the remainder were to be kept for possible further operations. General Skobeleff, therefore, recommended that great economy of ammunition should be practised, so as to keep the *maximum* number of rounds for the purpose of facilitating the storming of the place when the time came, and firing upon a crowded mass of men. While talking matters over, he said that the military history of later years, his own experience of war, and finally common sense, had convinced him of the propriety of his decision to distract the enemy only by firing occasionally from the guns, leaving the rest to the fire of picked rifle shots, and to spare his artillery ammunition for the decisive moment.

"If the French at Leipzig, on the evening of the 18th October 1813, had had 30,000 rounds of shot and shell still in hand, they could have commanded peace!" Even on the day of the storming of the fortress of Gok-Tapa, General Skobeleff insisted upon a careful note of the expenditure of ammunition being made; for he thought a second or third attempt might be necessary. "We might then be comparatively badly off for ammunition," concluded the Commander of the Expedition. "In serious campaigns from 250 to 300,000 rounds are fired; and our position is also serious, and we must be prepared for a similar expenditure."†

* 1st Sámur and 3rd Shirván Regiment, and 2 companies each from the 3rd Apsheron and 4th Daghistán Regiment.—*Author*.

† Pierron's "*Les méthodes de guerre actuelles et vers la fin du XIX siècle*," which General Skobeleff always carried about with him, and which he called his "*Korán*," as in it he found the answers to many questions, had also an influence on his determination to spare his ammunition. On page 210 of Vol. I is an extract from the instructions given by Napoleon III to General Forey when he was nominated to the command of the Expedition to Mexico on the 3rd July 1862: "One shot in Mexico is a hundred times dearer than one in France. I condemn unconditionally the loss of 1,000 rounds in the last affair at Puebla fired against the position from ranges at which the guns would produce no useful effect."—*Author*.

On the 22nd December 1880 (3rd January 1881), a camping ground was assigned for the cavalry about on a level with the Right Flank Kala and with General Petrúsevitch's Garden, so as to threaten the enemy's line of retreat into the desert, as the Commander of the Expedition always dreaded that the Tekkes might evacuate Dangil-Tapa in the night time; and he persistently held to this idea all through the siege. During the reconnaissance of the 22nd December 1880 (3rd January 1881), two places had been noted as especially favourable for the cavalry camp—a large enclosure with a mud wall to the north of the Right Flank Kala, and General Petrúsevitch's Garden. The Commander of the Expedition issued the following order at 11-15 p.m. without naming either place:—"At 9 a.m., on the 23rd December 1880 (4th January 1881), all the cavalry and the Horse Mountain Division will move into camp near the Right Flank Kala. Here it will entrench itself and keep up its tactical connection with the main camp. It will also undertake a foraging expedition, proceeding carefully."

About 1 a.m. reports were received that loud cries of men, bleating of sheep, roaring of camels, and baying of dogs had been heard from the direction of the fortress. The noise became louder, and soon got so near our camp that the voices of the men could be distinguished; but when General Skobeleff was awakened all the noise ceased. Supposing that the enemy was about to evacuate the fortress, General Skobeleff ordered Petrúsevitch not to wait till 9 a.m. for the advance, but to move forward at once from camp, wait at the Right Flank Kala till dawn, and then push forward towards the desert. The division of Dragoons, one *sotnia* each from the Taman, Poltava, and Lába Cossacks, and the Horse Mountain Division were at once fallen in, and, under General Petrúsevitch's command, they left camp at 4 a.m., and at 5-30 reached the Right Flank Kala.

Advancing at 6-45 a.m. from the kala towards Petrúsevitch's Garden, the commander of the column ordered the commandant of the kala, Major Bogayevski, in the event of the cavalry becoming hotly engaged, to send out 1½ of his two companies to join him; but did not think proper to fire on the garden first with artillery, so as not to betray our intention of seizing it, and so cause the enemy to rush to defend it, as Petrúsevitch thought that it was not occupied.

"General Petrúsevitch's Garden" stands at the confluence of two branches of the Sakiz-Yáb, and consists of a broad mound in the form of an irregular parallelogram surrounded by mud walls 5' 10" high. In the interior is a small kala with walls 14 feet high and a heavy gateway on its western side. The whole of the interior of the enclosure is crossed by mud walls, enclosing spaces of irregular form, and the ground round about is much intersected. Gardens enclosed by low and partly ruined mud walls continue up to the southern face, whilst along the eastern face runs a stream with steep banks, across which a bridge leads opposite the gate of the interior wall.

After the reconnaissance of the 22nd December 1880 (3rd January 1881), "Petrúsevitch's Garden" had been occupied by 400 Tekke volunteers under Kul-Bátir-Sirdár, 30 men being posted in the kala, the remainder along the outer wall and in the interior enclosures.

Covered by a chain of scouts, Petrúsevitch's column was moving within 50 paces of it, all being quiet. Dawn had begun to break, but a thick fog covered everything, and prevented a very distant view. When the head of the column had reached a point 150 paces from the north-east angle of the enclosure, shots fell from it, and Petrúsevitch at once ordered his troopers to dismount

and storm the place, he himself leading straight for the gate. Cossacks and Dragoons rushed into the enclosure, but had to drive the enemy from its interior with the bayonet; and Petrúsevitch was leading his men in the front of all, when he fell mortally wounded.

Outside the enclosure half a *solnia* had remained at 700 yards distant near an earthen dyke; and between the latter and the enclosure, at 200 paces from the latter, were the horse-holders and the Horse Mountain Division. The guns could not open fire on the enclosure, as our Dragoons and Cossacks were inside it. In the meantime the enemy's cavalry had begun to issue from the northern gates, and in heavy masses threatened the horse-holders. Colonel Artsishevski, who took command as senior, then ordered the half *solnia* left at the dyke to move up to the led-horses, dismount, and open fire, and the guns to protect the front of the horse-holders; and an officer was sent to the Right Flank Kala to ask for assistance. The Tekkes who were threatening the led-horses, on being met by the fire of the dismounted half *solnia*, turned back.

At this time a hot fight was going on within the enclosure, and the body of General Petrúsevitch changed hands several times. We drove the enemy back from the first courts, but the kala and the more distant enclosures remained in his hands, and we had already lost some 50 killed and wounded, among them three officers. Reinforcements of Tekke infantry were arriving from the fortress, our ammunition was running short, and the Horse Mountain Division, after having exhausted all its ammunition, had moved up to the garden. Still our men succeeded in driving the enemy out of all the enclosures, but had to halt on reaching the kala, as only shells could blow in its massive gates.

No sooner had Bogayevski heard the firing at "Petrúsevitch's Garden" than he ordered 1½ companies (the Rifle Company) of the 13th Turkistán Line Battalion and half of the 4th Company Shirván Regiment to get ready to advance to the support of the cavalry. This was at about 7-30 A.M., and the fog had now begun to clear off, so that from the Right Flank Kala the enemy's movement to the garden could be seen. The 4-pounder guns opened fire on the enemy's masses, and shortly afterwards our infantry also engaged his footmen, who showed themselves at the gate of the fortress nearest the Right Flank Kala. Through field-glasses it could be seen that our dismounted cavalry were still fighting in the interior of the garden; and, presuming from this that Petrúsevitch had not yet occupied it, Bogayevski decided to go to his assistance, and marched at 7-40 with the 1½ companies. At this moment Artsishevski's orderly officer galloped up with the request for aid, and then came a second with the news that Petrúsevitch was wounded, and with orders that the infantry were to hurry up. Major Bogayevski directed his men to double towards the south-west part of the enemy's position, and to take the gardens in rear, as there fresh masses of Tekke cavalry were arriving. After sending a section of infantry to escort the horse-holders, Bogayevski received orders from Artsishevski to occupy the near edge of the gardens, and cover the retreat of the cavalry. The infantry, therefore, formed up on the left of the cavalry line of skirmishers on the edge of the gardens, and opened fire on their opposite side, which was occupied by the enemy's riflemen, who were compelled to retire. Our infantry then advanced into the interior of the gardens, and under cover of it the cavalry collected its dead and wounded, and was formed up outside the enclosure, whence it commenced its retreat towards the Right Flank Kala. The enemy had evacuated the gardens, but the men in the kala were still holding out. When the cavalry had reached a point sufficiently distant from "Petrúsevitch's Garden," Artsishevski sent orders to Bogayevski to retire.

At this stage Colonel Kuropátkin arrived from the camp of the main body with the 1st Company of the Shirván Regiment, the 1st *Sotnia* of the 1st Orenburg and the 5th *Sotnia* of the 2nd Ural Cossacks, and the rocket section of the 1st Orenburg Cossacks. Under cover of these troops all the others who had been engaged in the reconnaissance retired to half-way between "Petrúsevitch's Garden" and the Right Flank Kala, and there halted. In this position they were joined by two other companies and half a battery, which had arrived from the camp of the main body under Colonel Yesipoff. The enemy followed up our troops as far as the Right Flank Kala, and then returned to their fortress. The troops not belonging to the garrison of the Right Flank Kala were then sent back—first to the Olga Kala, and then to the camp of the main body.

Whilst the action was going on in "Petrúsevitch's Garden," the Commander of the Expedition was in the front of the camp of the main body, and was listening to the firing of the cavalry column. At 8-30 A.M. he received the news that Petrúsevitch was wounded, and at once sent orders to him not to abandon the captured position till he himself arrived, but not to advance unless compelled to do so; but as the rumour had spread that Petrúsevitch was dangerously wounded, the Commander of the Expedition addressed his order to "Major-General Petrúsevitch or to Colonel Yesipoff, if General Petrúsevitch is not able, on account of his wound, to exercise command." From this order* it is clear that General Skobelev did not think there would be an action, and supposed that "Petrúsevitch's Garden" was unoccupied, and that our cavalry, after foraging in the enclosures, would choose its camping ground on the enemy's line of retreat to the desert. And now, having had no information as to the state of affairs, and fearing that the Tekkes would evacuate the fortress, he sent out two companies and four guns to form a corps of observation with the cavalry in the north front of the fortress at a point where the roads from Gok-Tapa meet, but still keeping up its communications with the Right Flank Kala.

Some time after the above mentioned instructions were sent off, General Skobelev heard that Petrúsevitch had been killed, and that the force had retired to the Right Flank Kala.† He at once galloped to this place, and found there only two squadrons of Dragoons, the rest of the troops having reached the Olga-Kala on their way back to camp.

Thus the attempt at investing Dangil-Tapa did not succeed, and cost us in killed 3 officers (General Petrúsevitch, Major Buligin, Commander of a squadron of the Tver Dragoons, and *Yesaul* Ivánoff, Commander of the *sotnia* of Taman Cossacks) and 12 men; one officer (Lieutenant Aleinikoff of the Lába

* "I do not know the state of affairs with you. It is evident that you are engaged with the enemy, and that we have been enabled to place a force near the desert about the north-east angle of the fortress to observe it, and cut off the retreat of the enemy on the siege works being pushed forward. The force placed under your command consists of 5 *sotnias* and squadrons of cavalry, 1 company of the Stavropol and 1 of the Crimean Regiment, half of the 4th Battery 19th Brigade, and 2 horse mountain guns,—in all 300 bayonets, 650 sabres, and 6 guns. The garrison of the Right Flank Kala is also under your orders.

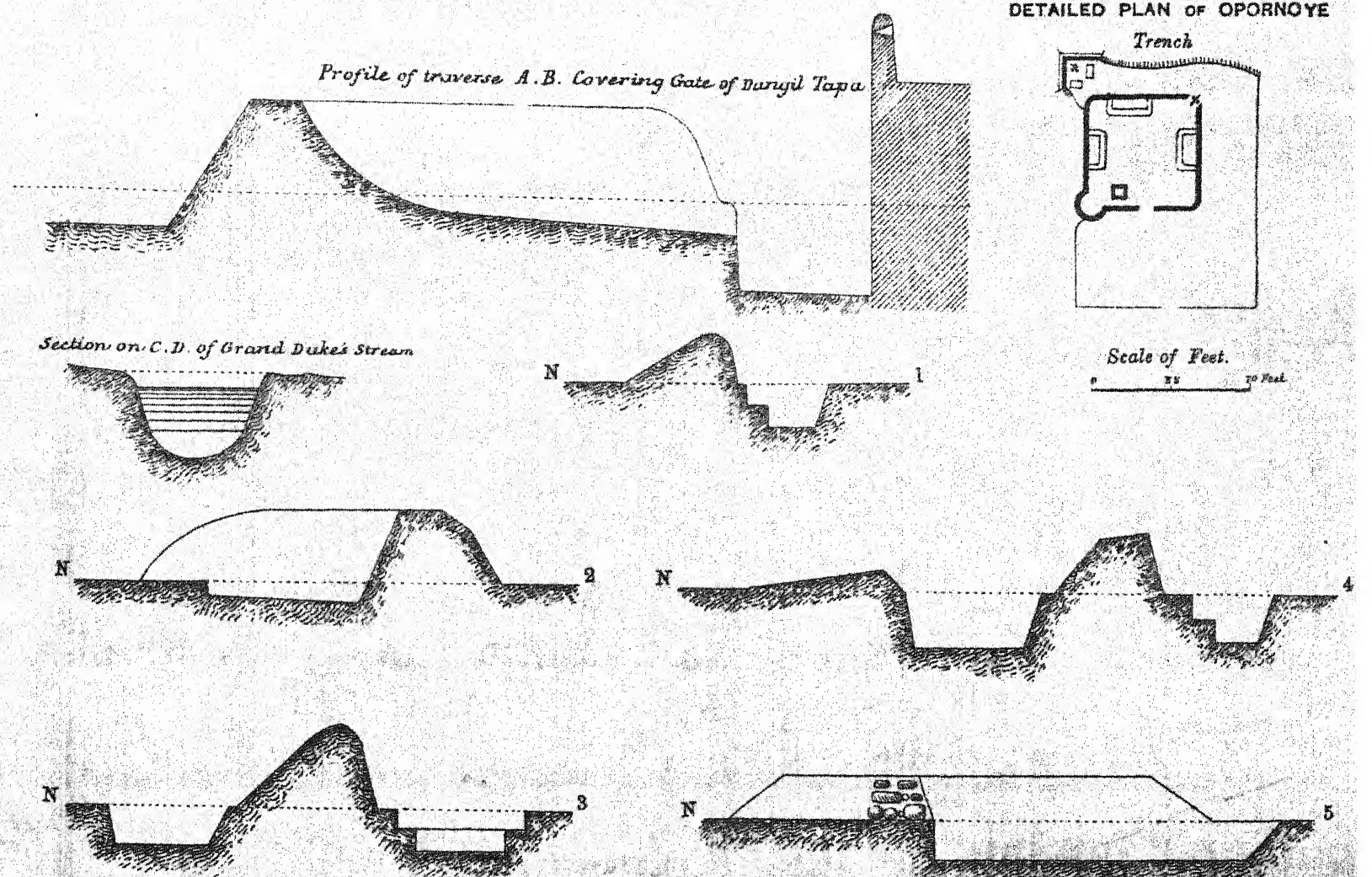
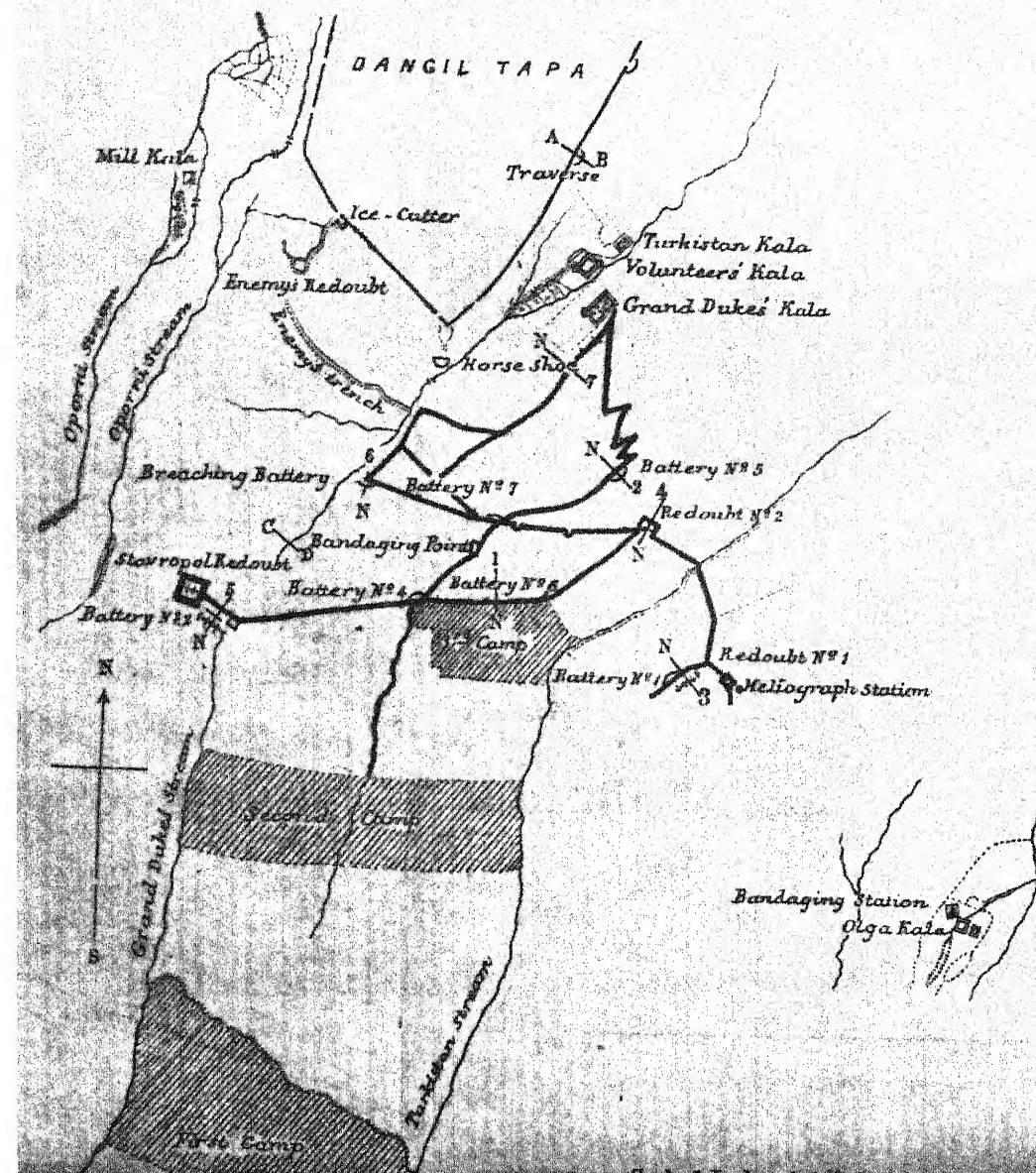
"After reconnoitring, report to me how you are off for supplies. In the open country and in the environs of the fortress I advise you to act with the utmost decision as long as you are not forced to an attack, which is not within the scope of the projected operation.

"I recommend you to choose a point for the camp of the observing force in a central position about the north of the enemy's fortress, where roads from the most favourable entrances to the fortress meet; and, finally, to keep up your immediate communications with the Right Flank Kala. I shall soon arrive myself, if the action does not cease."—(Instructions from General Skobelev, dated Yangi-Kala, 23rd December 1880 (4th January 1881), 8-30 A.M.)—Author.

† General Skobelev's first (8-30 A.M.) instructions were only received when our cavalry had been placed in the mud enclosure north of the Right Flank Kala (Journal of Military Operations of the Turkistán Column, Vol. I).—Author.

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PLAN AND PROFILES OF THE SIEGE WORKS UP TO THE GRAND DUKE'S POSITION.



Cossacks) and 37 men wounded, and 9 horses killed and 11 wounded.* The idea of investing the fortress was formed again afterwards,† but we had so few men that it could not be carried into execution. The enemy had, therefore, free communication with the desert, where his supplies were, and with the hitherto untouched parts of the *oasis* to the east of Dangil-Tapa. Taking advantage of his thus being able to leave the fortress at any time, the enemy interrupted our communications with Persia, and once, so to speak, invested us from all sides. This circumstance was taken advantage of also by several weaker spirits to leave the fortress while yet there was time, and so escape the dreadful fate of those who remained till the 12th (24th) January 1881.

The losses of the enemy on the 23rd December 1880 (4th January 1881) were very serious, and the greater number of the defenders of "Petrúsevitch's Garden" never returned from it. Only those who remained in the kala, and about 60 who escaped, saved their lives. In fact, the enemy considered that he had had the worst of the fight, and this impression lasted for three days, till the Tekkes heard that a Russian General and many soldiers had been killed. We also thought that we had suffered a defeat, and a depressing influence made itself felt in all when the dead were buried. Still, however, this action on our right flank was of some use, for it permitted of the first parallel being opened on the 23rd December 1880 (4th January 1881) in the day time; and this had never been expected.‡

As only a working party of 1,250 men could be placed at the disposal of the Commanding Engineer, the works on both flanks could not be pushed forward simultaneously; and it was, therefore, decided first to open the first parallel on the right attack, and afterwards that on the left. The first works (trench, Redoubt No. 1, and No. 1 Siege Battery) were begun at 1,400 yards from the south-east angle of the fortress under the direction of Captain Yablochkoff of the Engineers. At such a distance from the enemy work could be carried on by day, all the more so as the two companies told off as covering party were pushed forward beyond the mud wall along the Turkistán stream, and the enemy's attention was directed to "Petrúsevitch's Garden."

When the trench was nearly completed, General Skobelev, seeing the inactivity of the enemy, ordered the companies at work to be moved forward 450 paces to the front of the siege battery and 230 from the mud wall on the Turkistán stream, and here halted them with their front reversed. The line thus marked out formed the 1st parallel.§ The troops suffered some loss, as a result of working under fire without preliminary counter-battering, and also as the companies were not dressed on the same line. Still it was a very great advantage to have pushed the first parallel 230 paces to the front. The works on the right flank for its protection were begun by the construction of Redoubts Nos. 1 and 2. On the parallel attaining the required

* Report from Colonel Artsishevski, No. 81; Report from Major Bogayevski to Colonel Kuropátkin, No. 17, dated 30th December 1880 (11th January 1881); Report from Colonel Kuropátkin, No. 17, dated 2nd (14th) January 1881, *Artillery Journal*, No. 10 of 1881; and Diary of Military Operations of the Turkistán Troops in the Akhál Tekke Expedition in the *Toyennyi Sbornik*, No. 10 of 1881. General Skobelev in his report to the Commander-in-Chief greatly praised the conduct of Colonel Prince Eristoff and Prince Galitsin, Aide-de-Camp.—*Author*.

† It was proposed to occupy the cemetery at the north-west angle of the fortress and also "General Petrúsevitch's Garden" again.—*Author*.

‡ See plan and profile of siege works up to the "Grand Duke's position."—*Author*.

§ In opening the first parallel, the losses in the right attack were 11 killed and wounded.—*Author*.

depth, a communication between Redoubts Nos. 1 and 2 was at once begun; and this, together with those Redoubts and the Right Flank Kala, formed a defensive line, which protected the right of the siege works.

At about 10 A.M. part of the working parties from the right flank were taken away to the left, and the construction of the first parallel on both banks of the Grand Duke's stream was proceeded with, as also was the armament of No. 2 Siege Battery and the Enfilade Battery between the Opornoye and Grand Duke's streams.

About this time the Tekkes, who had not been attracted by the action at "Petrúsevitch's Garden," opened a small-arm fire on the working and covering parties, at first only dropping, but gradually increasing in strength, especially opposite the left flank, where the Tekkes occupied the Mill-Kala and the trenches in front of the wall. On this point also the Tekkes directed the fire of their gun placed in the "ice-cutter." The infantry covering party on this flank was accordingly strengthened, and half a mountain battery was moved out from camp and placed in No. 2 Siege Battery, whence it opened fire on the enemy collected near the Mill-Kala.

About 1 P.M. General Skobelev visited the works on the left flank and remained there an hour, inspecting them and the surrounding ground. The Commander of the Expedition especially noted the great length of the first parallel (1,850 yards), which was much too great for the strength of the guard of the trenches which the force could furnish. Besides, the Mill-Kala and the *terrain* in its vicinity permitted of the enemy collecting large bodies of men there to threaten our left flank, thus rendering the great length of the parallel still more inconvenient. This arose from General Skobelev having reconnoitred the south front on the 22nd December 1880 (3rd January 1881), while Rutkovski was doing the same on the east; and the former having decided to construct only a redoubt on the left bank of the Grand Duke's stream, but not having communicated this to Rutkovski, and as it had previously been determined to throw up a battery to enfilade the eastern face and take it in rear, the Commanding Engineer extended the parallel for 375 yards on the left bank of the stream to the Opornoye stream, and constructed batteries for reverse and enfilade between the Opornoye and Grand Duke's streams, and nearer the former, and for enfilading the east front of the fortress (No. 2 Battery).

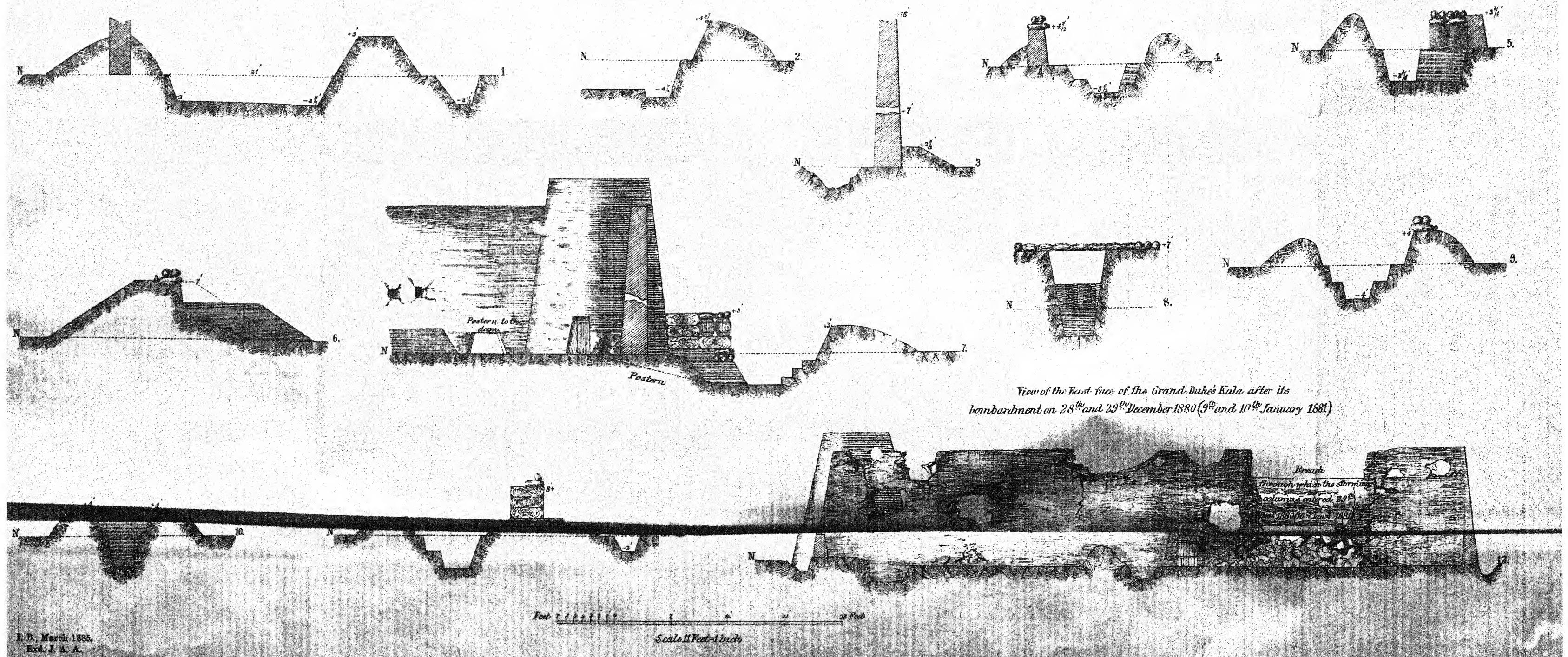
His inspection of the works on the left flank convinced General Skobelev that they were perfectly adapted to their object of enfilading the attacked front with artillery fire; but considering the obstinacy shewn by the enemy on their right flank, and the eccentric position of our left flank, which permitted of the enemy easily seizing the newly thrown up trenches, General Skobelev ordered all the works on the left bank of the Grand Duke's stream to be filled in during the night of the 23rd and 24th December (4th and 5th January), and the works on the right bank to be much strengthened and brought into communication with those of Colonel Kuropátkin's attack.* The battery (for reverse and enfilade fire) on the left flank was, however, left standing, and the ground cleared of all cover for 120 yards to the left of the Grand Duke's stream. After an inspection of the works on the right flank, General Skobelev considered that they fulfilled their object.

The Commander of the Expedition then gave Rutkovski the following directions as to the conduct of the siege:—(1) The attack is to be made on the south-

* As may be seen from the plan of the works constructed between the 23rd and 28th December (4th and 9th January) on the 23rd December (4th January), there was a gap of 420 yards between the trenches of the right and left attacks.—*Author*.

PROFILES

Of the Grand Duke's Position and the closer approaches from it against Dangil-Tapa.



east angle of Dangil-Tapa; (2) the main object of the right attack in the first period of the siege will be the capture of the Grand Duke's position, while the left attack will only have a subsidiary importance till this position is taken; and the extension of the works on the left bank of the Grand Duke's stream can only be made gradually and in accordance with the results obtained upon the right flank, *i.e.*, the advance of these works must be made very carefully and only if serious advantages from a tactical, artillery, or engineering point of view are to be obtained;* (3) to ensure unity of direction in the works, the Commanding Engineer is to give all orders, and without his permission no advance is to be made;† and (4) the works are to be estimated for on the basis of a working party of 800 men being available.

To make the direction of the siege more easy, the Commander of the Expedition divided the siege works into two flanks—the right, including the Olga and Right Flank Kalas, under Colonel Kuropátkin; and the left, with Opornoye, under Colonel Kozelkoff. Sixteen companies were placed under the orders of each of those officers,‡ out of which they were to furnish the working parties and guard of the trenches, and generally carry out all the duties of the attack under their orders. To take charge of the camp, of which Lieutenant-Colonel Haidaroff was appointed Commandant, and to form a general reserve, 7 companies§ were detailed. The Sapper Company was placed at the disposal of the Commanding Engineer.¶

From this distribution it will be seen how difficult the duties of the troops during the siege were. Even the men sent from the trenches into camp to rest could not take full advantage of their tour of duty, but had to act as escorts to foraging columns and convoys marching to Sámurskoye, and had at all times to be in readiness to turn out to support the troops in the trenches.

As regards the cavalry, since a larger number of *sotnias* had been left in rear on the lines of communication than had been intended on our first advance into the *oasis* in the end of November, the Commander of the Expedition formed from the corps before Gok-Tapa a cavalry reserve under Prince Eristoff (division of Dragoons and of Poltáva Cossacks), and a combined regiment under Colonel Artsishevski consisting of the 1st and 3rd *Sotnias* of the Taman, the 5th *Sotnia* of the Lába, and the 2nd *Sotnia* of the 5th Orenburg Cossacks, and the Horse Mountain Division.¶¶

By the evening of the 23rd December 1880 (4th January 1881) there had been constructed—On the right attack, No. 1 Enfilade Battery and 935 yards of trench, and the Redoubts Nos. 1 and 2 had been finished. On the left attack part of the parallel (650 yards), No. 2 Enfilade Battery, and a battery for enfilade and reserve fire, and the construction of Redoubt No. 3 had been

* Instructions to Colonel Rutkovski, dated 23rd December 1880 (4th January 1881).—*Author.*

† Instructions to Colonel Rutkovski, No. 8665, dated 24th December 1880 (5th January 1881).—*Author.*

‡ For the right attack were detailed,—3rd Company of the 5th and 1st and Rifle Companies of the 13th Turkistán Line Battalion, 4th Apsheron Regiment, 1st and 3rd Shirván Battalions, and Sub-Lieutenant Voropánoff's Volunteers. One company 3rd Sámur Regiment and 2 *sotnias* of Cossacks formed the garrison of the Right Flank Kala. For the left attack were detailed—3rd Apsheron Regiment, 3rd Stavropol Regiment, Trans-Caspian Local Battalion, 1st, 13th, and 14th Companies Daghistán Regiment, and Tserenjálloff's Volunteers. A company of the 3rd Sámur Regiment formed the garrison of Opornoye.—*Author.*

§ 1st Sámur Battalion, 1st Company 3rd Sámur Regiment, and 2 companies 4th Daghistán Battalion.—*Author.*

¶ General Orders, Trans-Caspian Field Force, Nos. 560 and 568, dated 25th and 28th December 1880 (6th and 9th January 1881).—*Author.*

¶¶ This order cancelled No. 494, dated 18th (30th) November, and the combined Akhál-Tekke Cavalry Brigade was dissolved (General Order, Trans-Caspian Field Force, No. 5665, dated 26th December 1880 (7th January 1881)).—*Author.*

depth, and the defenses. At taken of the No. 2 Grand Al "Peti partie oppos trench of the flank out from enem. A remai Coma lel (1 trench in its threa more south was redou cated up a Eng the the ing tha from the of t ord dur wor cat and cle Af ed tio — (4th the

begun. Our total losses on this day were 1 general, 1 field officer, 1 squadron officer, and 19 men killed, 1 officer and 49 men* wounded, and 12 horses killed and 16 wounded.

On the evening of the 23rd December 1880 (4th January 1881), the Commander of the Expedition again expressed his opinion that the camp should be moved forward; but there were the following reasons against this:—(1) The troops would be more disturbed by the enemy; (2) the discontent which would be produced by the troops having to leave the established camp and form a new one (cooking-places, &c.); and (3) the impossibility of saving the rear of the camp from annoyance from the side of Yangi-Kala, unless this place were occupied.† The camp was, therefore, left in its former position.

During the night of the 23rd and 24th December (4th and 5th January 1881), the day-time of the 24th December (5th January), and in the night of the 24th and 25th December (5th and 6th January), the following works were carried out:—(1) On the right attack—The first parallel was widened, as also the communication between Redoubts Nos. 1 and 2. Redoubt No. 2 was finished. The first parallel was prolonged 210 yards to the left to meet that on the left attack. Redoubt No. 1 and No. 1 Siege Battery were armed—the former with 2 mountain guns,‡ the latter with 2 heavy guns;§ and in Redoubt No. 1 a heliographic station was established on a watch-tower, which was in communication with the Right Flank Kala and the camp of the main body. (2) On the left attack the trenches on the left bank of the Grand Duke's stream were filled in. A trench, 150 paces long, with a Redoubt (No. 3) for a company, and 2 mountain guns at the end of it and a traverse in the middle, and Battery No. 2 for 4 guns, were constructed. On the right bank of the stream the first parallel, 608 paces long, was finished, and covered communications established between it and the stream, across which a bridge of fascines was made.||

On the 24th December 1880 (5th January 1881), the Tekkes hardly shewed themselves outside the wall; and it was only seldom that they were noticed at work in the ditch and at the traverse opposite the entrances on the south-east and east of the fortress. The guard of the trenches, therefore, fired very seldom. During the whole of the 24th December 1880 (5th January 1881) the guard of the trenches of the left attack, consisting of 4 companies, fired only 2,070 cartridges; and no artillery ammunition was expended. On this day a service of *jigits* was organized in the Right Flank Kala, to bring news by day or night of any movements of the enemy in the direction of Askhábád or of the desert. For this purpose 15 Turkumáns and Kirghiz were selected and placed under Nafas-Mergen (of the JáfARBai tribe).¶

As there was no grain in the supply-depôt, and as all the grass had been finished in the environs of Yangi-Kala at 8 A.M. on the 24th December (5th January), the Commander of the Expedition sent out a column under Colonel Artsishevski to forage in the nearest villages on the Askhábád road. About 4 P.M. the column returned with supplies of forage and firewood and without

* Of these, 2 men were killed and 12 wounded in the left attack.—*Author*.

† Memorandum from General Skobeleff to Colonel Kuropátkin, dated 23rd December 1880 (4th January 1881), 8-30 A.M.—*Author*.

‡ At first of the 6th Battery 21st Brigade, but afterwards of the 4th Battery 2nd Turkistán Brigade.—*Author*.

§ Of the 4th Battery 20th Brigade.—*Author*.

|| Account of the operations of the troops of the left attack on the 23rd and 24th December 1880 (4th and 5th January 1881) by Colonel Kozelkoff.—*Author*.

¶ Diary of the Staff of the Force, Section of Operations, 1880, No. 26, pages 405 and 407.—*Author*.

having been disturbed by the enemy. As, however, the large supplies of forage collected could not all be brought in at once, on the next day, the 25th December 1880 (6th January 1881), a second column consisting of 3 *solnias* of Cossacks, with the rocket section under Lieutenant-Colonel Gulyaeff, was sent out. This time about 400 Tekke horsemen left the fortress by the northern gates, and also advanced to forage on the Askhábád road. When they appeared, however, the foraging party had almost completed its task, and the column then started for camp. All the same, Colonel Kuropátkin with a company, a *solnia*, and two guns and 2 companies of the heavy battery from the main body were sent out to afford it support, if required. The Tekkes, who had begun to press the rear-guard, retired on perceiving the approach of the reinforcements, and the column returned to camp without having suffered any loss. The forage brought in was ordered to be handed over to the supply depôt for issue to the horses of the wheeled transport.*

After this, foraging columns were constantly sent out, but always with infantry and artillery; and when the supplies in the neighbouring villages were exhausted, the parties were sent as far as 10 miles out—to the village of Bábaráb. As they could not return to camp on the same day, they were allowed to pass the night on the Askhábád road; and though constant firing took place on these expeditions, we suffered no loss. These foraging parties, as the Tekkes told us after the capture of Gok-Tapa, produced a great impression on the enemy, for they took it as a sign that we were strong, seeing that, while besieging the fortress, we could afford to detach troops on the Askhábád road, and escort convoys to Sámurskoye.

During the night of the 25th and 26th December (6th and 7th January) were constructed the approaches to the second parallel and the main communication (in the ravine) with camp; and on the 26th these works and those on the right attack were completed, as picked shots were always firing on the ground between Redoubt No. 1 and the Olga Kala. From the former a trench, 100 paces long, was thrown out in the direction of the Olga Kala, and a trench for reserves was made near No. 1 Siege Battery.

During the night of the 26th and 27th December 1880 (7th and 8th January 1881), the second parallel was opened, and batteries Nos. 3, 4, 5, and 6 were built. Battery No. 3 was to fire on the Grand Duke's Kalas and the ground between them and the fortress; No. 4 was armed with mitrailleuses to render the guard of the trenches more independent; No. 5 was a mortar battery to fire on the Grand Duke's Kala and the interior of the fortress; and No. 6 was to fire on the counter-approaches thrown out from the south front of the fortress.

On the 27th December 1880 (8th January 1881), the Cavalry and Olga Kalas were arranged for artillery and rifle fire, and loopholes were made and banquettes constructed along the walls. To the garrison of the former a detachment of 20 men and an Engstrom gun were added, and to that of the latter a company of infantry. As the Tekkes were well under cover, it was ordered to use indirect fire by volleys against them, three to six volleys being fired by day and three by night, the rifles being sighted at from 600 to 2,000 paces.

The artillery operations between the 24th and 25th December 1880 (5th and 9th January 1881) were as follows:—During the night of the 24th and 25th December 1880 (5th and 6th January 1881) Redoubt No. 2 was armed with a mountain gun and a 4-pounder brought forward from No. 1 Siege Battery; Battery No. 2 with four 4-pounders, and Battery No. 6 with a mountain gun. On

* Journal of Military Operations of the Akhál-Tekke Expedition.—Author.

the night of the 27th December 1880 (8th January 1881) the two mountain guns in Redoubt No. 1 were replaced by two 9-pounders, the former being transferred to Battery No. 6; Battery No. 5 was armed with three mortars; Battery No. 4 with two naval mitrailleuses, and Battery No. 3 with three 9-pounders. An Engstrom gun was placed in the Cavalry Kala. In the above period 377 rounds of shell and 10 war rockets were expended. The artillery fired only by special order, and only a given number of rounds at a time, salvos being sometimes fired from all the guns against the fortress. Of these, one was fired at midnight on the 24th and 25th December 1880 (5th and 6th January 1881), and two at 10 A.M. on the 25th December 1880 (6th January 1881). Our losses between the 24th and 28th December 1880 (5th and 9th January 1881) were two men killed, one field officer (Captain-Lieutenant Zuboff, who had been named Commandant of the Right Flank Kala after Major Bogayevski had been appointed Trench-Major of the Right Attack) and two men wounded. Lieutenant Sheman (of the Navy) was named Commandant of the Right Flank Kala, *vice* Zuboff.

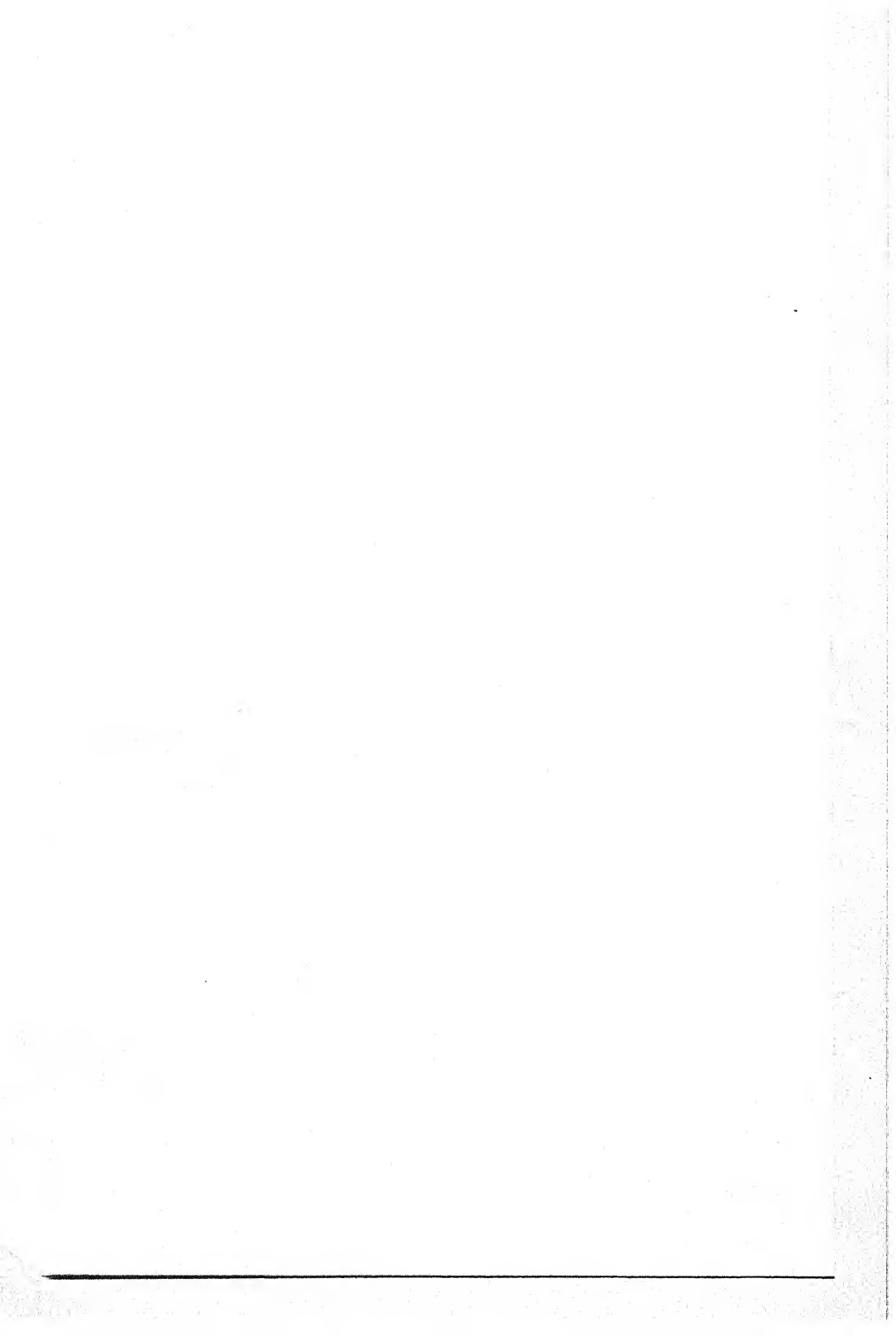
The enemy continued to strengthen his defences opposite our left, between the (Opornoye stream and the fortress, and made a large place-of-arms between the Mill Kala and the "ice-cutter"; but, as a rule, he remained quiet and did not disturb the siege works. His quietness and inactivity caused several officers to advise the Commander of the Expedition to occupy the cemetery opposite the north-west angle of the fortress to annoy the enemy; but this advice was not taken, as our weakness prevented us from detaching troops so far from camp, for such a detachment would have to have been of considerable strength to prevent its being itself invested. Instead of that, the Commander of the Expedition resolved to storm the Grand Duke's Kala on the 29th December 1880 (10th January 1881) after a preliminary bombardment, and then on the 30th December 1880 (11th January 1881) to occupy "Petrúsevitch's Garden," which would press the enemy sufficiently closely, and would prevent him from entering the fortress from the side of the desert with impunity, or compel him to make a long *déroul*.

On the night of the 27th and 28th December 1880 (8th and 9th January 1881) the second parallel was finished, as also the communications to it. The whole of the 28th December 1880 (9th January 1881) passed quietly, except for the usual dropping-fire.

On this day a great council was held in Dangil-Tapa, and Taghma-Sirdár promised to wipe out the Russians by a grand night *sortie*, which he himself was to lead. His proposal was accepted, and 4,000 men were gathered from those who desired to take part in the affair, including many Marvliis, under their leader Kajar-Topás-Khán, and a few women. To force the volunteers to fulfil their vow, the Kháns and Elders took up a position at the gates of the fortress to cut off the heads of those who ran away. On the approach of darkness, Taghma-Sirdár caused them all to rush out suddenly without firing, and attack with cold steel the siege works in the night.

On the evening of the 28th December 1880 (9th January 1881) the following troops were in the advanced trenches of the right attack:—In Redoubt No. 2, 14th Company Apshéron Regiment; in the second parallel, the 15th and 16th Companies of the same; to the right of Battery No. 3, half a company of volunteers, who were to throw out posts of observation when ground was broken for the new works; and on the left flank of Battery No. 3, the 9th Company Stavropol Regiment and the 11th Company of the same, which had just come up to

* See plan of the Tekke sortie of 28th December 1880 (9th January 1881).—*Author*.



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* See plan of the Tekke sortie of 28th December 1880 (9th January 1881).—*Author*.

relieve the former. The reserve of the attack was formed by the Rifle Company of the 13th Turkistán Battalion in Redoubt No. 1, and the 1st Company of the same covering No. 1 Siege Battery. As a general reserve at the Olga Kala were the 2nd and 3rd Companies and the 3rd Battalion of the Shirván Regiment, and the 3rd Company of the 5th Turkistán Line Battalion. These latter, whose turn it was for duty, had arrived at the Olga Kala at 5 P.M., and were to move thence to the relief of the troops in the trenches. On their arrival, however, they had been detained at the kala by Major Bogayevski, in order that the officers with those troops might be informed of the plan of the works for that night and next day. At the beginning of the action the general reserve was joined by the 15th* Company of the Apsheron Regiment, who were in camp and off duty.

The artillery of the right attack was distributed as follows:—In Redoubt No. 1, two 9-pounders of No. 2 Mobile Battery; in Siege Battery No. 1, three 4-pounders of No. 1 Mobile Battery; in Redoubt No. 2, one 4-pounder of No. 1 Mobile Battery and one gun of the 6th (Mountain) Battery 21st Brigade; in No. 6 Siege Battery, one gun of the latter battery and the Turkistán Mountain Division; in Siege Battery No. 5, three mortars; in Siege Battery No. 3, three 9-pounders of No. 2 Mobile Battery; and in Siege Battery No. 4, two naval mitrailleuses.

About 6 P.M. the Director of the siege works on the Right Attack, Captain Yablochkoff, went with Lieutenants Chernyák and Sandetski of the Sappers to trace out the new works, which were to be executed that night. These officers were accompanied by 5 sappers and 5 volunteers. They had hardly advanced 150 paces from Battery No. 3 when they perceived heavy masses of the enemy issuing from the ditch of the fortress, and they at once turned back to the trenches occupied by the Apsheron Regiment. The men of this regiment, in expectation of being relieved, had, by order of the Commander of the battalion, Prince Mahaloff, packed up everything and prepared to march off, and the officers were gathered round their Commander to receive orders. Hearing the noise and tramping of thousands of men running, the officers rushed to their posts and ordered the men to load. Eye-witnesses state that the volunteers and sappers running back to the trenches with the engineer officers cried out, "Do not fire; those are our own men!" The Commander of the battalion did not venture, therefore, to open fire, fearing that he might shoot down the working parties in advance. A volley was fired too late and hastily, and the greater part of the bullets flew over the heads of the Tekkes.

The enemy assaulted simultaneously the front of the trenches of our right attack and our right flank in the space between Redoubts Nos. 1 and 2, and turned our line of trenches by passing between them and the Olga Kala. They used only cold steel, and were mostly in their shirts and trousers, with sleeves and trousers tucked up, and barefoot.

At the moment of the onslaught the Commanders of both attacks, the Chief of the Staff, and the Commanders of the Engineers and Artillery were in the *kibitka* of the Commander of the Expedition, consulting with him on the further operations proposed. On hearing the cries of the enemy and a heavy cannonade breaking out, all rushed to their posts, while General Skobelev, taking the camp reserve, consisting of 2 companies of the Sámur Regiment, moved out to the front of the camp, and tried to make out from the wavering of the line of fire what course affairs were taking, but did not advance, as he expected an attack on other parts of our works or on the camp. Three

* 13th Company.—J. M. G.

companies (2nd, 3rd, and 4th) of the Trans-Caspian Local Battalion under Major Khalich, detailed for work that night in the left attack, were at that time moving out from camp to the trenches and had reached the first parallel; but hearing the cries and firing on the right, Khalich at once quickened his pace and moved his companies to the scene of action.

The enemy attacked simultaneously the mortar battery (No 5) and Redoubt No. 2, and the men of the former had only time to seize their revolvers and swords, while the 4-pounder in Redoubt No. 2 had hardly time to fire one round of case. A hand-to-hand fight began, in which the enemy seized the colours of the 4th Battalion Apsheron Regiment, in the defence of which the Battalion Commander, Lieutenant-Colonel Prince Mahaloff, Sub-Lieutenant Chikareff, Commanding the 14th Company, Sub-Lieutenant Gotto, Standard Bearer, Sergeant Zakharoff, and almost the whole of the 14th Company, perished. In the same way almost the whole of the gun detachment of the 6th Battery 21st Brigade were cut down, No. 1, Bombardier Manshoff, being killed while trying to carry off the vent-piece. In the mortar battery, the enemy dragged all the mortars into the trench, threw away all the shells and cartridges, and carried off the men's great-coats, cooking-pots, and mess-tins. Lieutenant-Colonel Mamatseff, Commanding the Artillery of the Right Attack, was killed, and Lieutenant Pragulbitski, Commanding the Battery, was wounded. The half company of volunteers under Sub-Lieutenant Mahometoff bravely defended themselves against the Tekkes, rushing on them, and succeeded in holding the trench occupied by them.

After driving the 15th and 16th Companies of the Apsheron Regiment into the space between Siege Batteries Nos. 4 and 6, seizing the latter, and occupying all the space between the first and second parallels, the enemy rushed upon Siege Batteries Nos. 3 and 1, and at the same time heavy masses attacked Redoubt No. 1 and tried to turn it by passing between it and the Olga Kala, thus turning all our siege works and leaving nothing between them and our camp. During the first minutes of the battle we had lost three mortars, one 4-pounder, and four mountain guns.

Thanks to the steadiness of the gunners, who brought their guns, loaded with case, to bear on all sides, and the firmness of the infantry occupying Redoubt No. 1 and covering No. 1 Siege Battery, these works did not share the fate of Batteries Nos. 5 and 6 and Redoubt No. 2; and the boldness of the front shewn here checked the enemy temporarily, although a few groups forced their way into Redoubt No. 1. New masses, however, came up and the situation of Redoubt No. 1 became very critical, and was made worse by the men of the Apsheron Regiment falling back partly on the outside of the communication between Redoubts Nos. 1 and 2 and straight on Redoubt No. 1. At this time, however, half of the 1st Company of the 13th Turkistan Line Battalion came up from No. 1 Battery to support its Rifle Company, and was placed to the left of the redoubt in the communication, whence it opened fire by volleys at point-blank range, and shortly afterwards the three companies of the Trans-Caspian Local Battalion under Major Khalich, and the reserve from the Olga Kala under Kuropátkin, arrived on the scene.

Major Khalich, advancing between the first and second parallels, reached No. 6 Battery, to which also the second half of the 1st Company 13th Turkistan Battalion and half of Voropánoff's volunteers had been moved, the latter having come up from camp, singing. These troops drove back the Tekkes and recaptured two mountain guns, of which one had already been dragged over the parapet. The third gun had already been taken away by the enemy to

Dangil-Tapa. Leaving here his 4th Company, Khalich, by direction of Major Bogayevski,* advanced at the double on the mortar battery.

In order to beat back the enemy, who were trying to turn Redoubt No. 1, Colonel Kuropátkin placed two companies of the 3rd Battalion Sámur Regiment in prolongation of the line of Redoubts Nos. 1 and 2; and the volleys of these companies, and the case from the two 9-pounders in Redoubt No. 1, soon brought the Tekkes to a standstill, those who had penetrated into the redoubt being cut down. The determined nature of the attack may be judged from the fact that the most advanced of the enemy's dead bodies lay only four paces from the front of the companies occupying the communication between Redoubts Nos. 1 and 2 and those to the east of Redoubt No. 1. At this time an unknown hero of the Apshe-ron Regiment died a glorious death, although by the hands of his own comrades. He was retiring along with some others from Redoubt No. 2 along the exterior of the communication, but seeing that the soldiers, directly towards whom he and his companions were running, had ceased firing, he called out, "Fire away! Fire away! Never mind us! The Tekkes are behind us!" Not a second was to be lost; the men fired; the Tekkes were stopped, but the soldier of the Apshe-ron Regiment fell by our own bullets.

In order to recapture the positions we had lost, Colonel Kuropátkin ordered the 4th Company Trans-Caspian Local Battalion to advance on Redoubt No. 2, which it quickly cleared of the Tekkes without giving them time to carry off the guns. To this point were also moved the 3rd Company 5th Turkistán Battalion and the 2nd of the Shirván Regiment. All these troops, placed partly along the parapet and partly in the ditch, opened a double-rank fire on the enemy, thus keeping him at some distance and forcing him to withdraw. Two companies of the Shirván Regiment sent up to the mortar battery found it already occupied by Voropánoff's volunteers, and the mortars again passed into our hands. Two companies of the Trans-Caspian Battalion shortly afterwards came up, and after them General Skobelev himself, who was present at the final repulse of the enemy by artillery and rifle fire.

In 7 to 10 minutes the whole affair was over, and we had recaptured our positions, the enemy hastening to retire into his fortress.

Simultaneously with the attack on the right flank of our siege works, the enemy had attempted to attack the Right Flank Kala, the garrison of which consisted of the 9th Company Sámur Regiment, a detachment of Cossacks, two 4-pounder guns of No. 1 Mobile Battery, and two naval mitrailleuses under Naval-Lieutenant Sherman. Remarking that masses of the enemy had begun to form opposite the kala, Sherman posted his whole garrison along the parapet, and ordered them to maintain the strictest silence and keep their rifles laid on the enemy, the guns being loaded with case. It was decided to let the Tekkes approach to within fifty paces.

The enemy, whose masses continually increased, began to utter cries and dispute among themselves; and those of our men who understood Turki were ordered to translate what they could make out from the general tumult. They said that the Tekkes were encouraging one another to advance to victory, saying that they were numerous and that the Russians were few in number, and that God would help them to cut up the Giaurs, &c.

Twice the crowds of Tekkes advanced towards the kala, and both times they retired, as not a shot was fired by our men. On their third advance they came upon one of our detached posts, which fired a volley at them, after

* In Appendix No. 77, see Instructions to Major Bogayevski.—*Author.*

which a volley was fired from the kala, and the machine guns opened fire, along with the infantry. The enemy drew back, and although encouraged by their leaders to advance once more against the kala, they were met by such a heavy fire, that they did not advance closer than 200 paces from the wall. After this the Tekkes made one more rush on the right face of the kala, at the same time as their attack on the trenches of our right attack was beaten off. Before this fourth attack a number of the enemy were observed moving towards "Petrúsevitch's Garden," from which they advanced against the right of the kala, while at the same time another mass was dimly seen through the darkness advancing against its front. The garrison was in readiness, and awaited the attack in silence; but, just as both masses were approaching the walls, the interpreters declared that cries were heard from the fortress calling upon the attacking parties to fall back, and informing them that the attack upon the trenches had been beaten off with heavy loss. Both masses were close to the kala when suddenly music burst forth from the trenches, and the Tekkes at once hastened to retire into the fortress. This music, it appeared, produced a most depressing influence on the Tekkes, and one which they could not get rid of, as it forced the *Isháns* to pray and caused terror to all; for they imagined that when the music played the Russians were advancing to take the fortress.

On the 27th December 1880 (8th January 1881), we lost the colour of the 4th Battalion Apsheron Regiment, one mountain gun with two ammunition boxes, 5 officers (Lieutenant-Colonels Mamatseff and Prince Mahaloff, and Sub-Lieutenants Sandetski, Chikareff, and Gotto), 1 surgeon (Iroitski of the Apsheron Regiment) and 91 men killed, and 1 officer (Staff-Captain Pragulbitski* of the Artillery) and 30 men wounded. With very few exceptions, all the killed and wounded fell before cold steel, and the heads of most of the killed were cut off, stuck upon poles, and set up before the *kibitkas* of those who had killed them. The 14th, 15th, and 16th Companies of the Apsheron Regiment suffered most, as they had 4 officers and 74 men killed and 28 men wounded.

The comparative success of the *sortie* may be explained by the unusual quickness and suddenness of the attack—all the more so as the preceding nights had passed so quietly. The length of the trench was too great, for the guard which could be spared from the force for the second parallel, and the few companies composing it, had great difficulty in stopping the rush of an enemy determined upon coming to close quarters. Finally, the parallels were not yet finished, as their banquettes had not been cleared; there were no steps up to them; the slopes of the trench were so steep that the soldiers had great difficulty in moving backward or forward to meet the Tekkes, mounting on the parapet and leaping down upon them, and there were no strong redoubts with independent garrisons on the flanks to prevent the trenches being turned. The working parties and the time allowed to complete the trenches were insufficient, and even the redoubts were of such weak profile that the escalade of No. 2 presented no difficulties to the enemy.†

Immediately after the *sortie* had been repulsed, orders were issued for the working parties to be told off anew to complete the task for that night, and

* This officer is previously described as Lieutenant.—J. M. G.

† Report from Major Bogayevski to Colonel Kuropatkin, No. 21, dated 5th (17th) January 1881; Report from Colonel Kuropatkin, No. 58, dated 11th (23rd) January 1881 (*Journal of Field Operations of the Turkistan Force in the Akhál-Tekke Expedition*; *Engineer Journal*, No. 3 of 1882; *Morskoi Sbornik*, of 1882); Report from Major Khalich, No. 22, dated 16th (28th) January 1881.—*Author*.

General Skobelev especially insisted on the work being finished by morning, as he hoped thus to produce a great moral impression. The Commander of the Right Attack received from him at 2 A.M. on the 29th December 1880 (10th January 1881) the following order:—"Make arrangements for the works ordered in front of the second parallel being finished this night at any cost. In the event of an attack, it is to be beaten off and the works continued. The trenches are to be made of such a profile as to protect the men from fire in the morning. Losses must not be considered, only the punctual execution of my orders. I have two companies of the Daghistán Regiment as a reserve in my hands. Forward! and again forward!!" The Commanding Engineer received similar instructions.

The works included two branches of the approach to the Grand Duke's Kala, 245 yards long, so as to get close to this position and facilitate its capture by assault,—the completion of the mortar battery and securing of its right flank by a small broken trench, and the opening of a demi-parallel on the left flank from No. 3 Siege Battery directed on the Mill-Kala and extending 336 yards to the Grand Duke's stream; and all these were finished by dawn under a tolerably heavy fire, which, however, caused us little loss on account of the darkness.

In consequence of the proximity of the enemy to the works of the right attack, the following system was adopted by Colonel Kuropátkin. The companies (9th and 10th of the Shirván Regiment, under Major Sivinís) detailed for the working party were extended in the second parallel in front of the mortar battery, and on the word of command they crossed the parapet quietly and advanced 120 paces. They were then halted, and the front rank was moved forward 10 paces, and placed so as to form a covering party for the rear rank, who carried on the work. From each company, and also from that occupying Redoubt No. 2, a detached post was sent forward. The second rank then commenced the branch of the approach nearest the enemy, and obtained cover within half an hour, upon which another company (the 3rd of the Shirván Regiment) was brought forward to throw up a communication between the second parallel and the advanced trench dug by the 9th and 10th Companies.

Notwithstanding that detached posts had been pushed forward, the companies occupying the advanced trench and the second parallel remained till dawn on the banquettes ready to receive the enemy, and no sleeping was allowed, the men being from time to time fallen in on the banquettes; but after the weariness caused by the action and the night work, many officers and soldiers fell asleep in most uncomfortable positions (*Journal of Military Operations of the Turkistán Force in the Akhát-Tekke Expedition*).

During the night we disturbed the enemy by indirect artillery fire and volleys of small-arms. The sortie of the 28th December 1880 (9th January 1881) was the most successful operation undertaken by the enemy during the whole war. The losses of the Tekkes, according to their own account, were insignificant, while the success raised their spirits and made all the defenders hope that the Russians would not be able to take the fortress. They were under the impression that we had lost half our force, whilst the gun and the few rounds of ammunition captured served as a proof in their eyes that the part of our troops which had been attacked by them had been completely annihilated. A Kipchák inhabitant of Begenj brought the colour of the Apsheron Regiment into the fortress. The captured gun was used in the affair of next day, and in the morning our own shells, which had been taken by the enemy,

began to fall into our camp; but the Tekkes did not understand the secret of setting the fuze, and fired the shell like a cannon ball, so they did us scarcely any harm.

On the 29th December 1880 (10th January 1881), the camp of the main body was moved forward 585 yards, so as to bring the troops nearer to the siege works, and thus open up connection between the troops in camp and those in the trenches; for the success of the enemy in the sortie of the 28th December 1880 (9th January 1881) had shewn how great were the disadvantages of the camp being at Yangi-Kala. From this date to the end of the siege the camp was within range of rifle fire from the fortress, and every day we lost men, and especially horses.

As the sortie on the evening of the 28th December 1880 (9th January 1881) had raised the spirits of the enemy, Colonel Kuropátkin was ordered to storm the group of kalas called the Grand Duke's Kalas on the 29th December 1880* (10th January 1881), with a view to preventing our troops from thinking that the initiative had passed into the hands of the enemy, and also to prove to the enemy that his sortie had made no impression upon us.

The Grand Duke's position consists of three kalas, named by us afterwards the "Main Kala," "Volunteers' Kala," and "Turkistán Kala." The former lies on the right bank of the Grand Duke's stream, and is 230 yards from the wall of the fortress; the other two are on the left bank, the Volunteers' Kala being only 120 yards from the fortress. In its course from the angle of Dangil-Tapa to the Volunteers' Kala the Grand Duke's stream is raised on a dam, which, near the latter Kala, attains a height of 6 feet. In front of the Volunteers' Kala the water flows into a ravine, and runs in it to beyond the Turkistán Kala, where it re-enters its natural bed. The ground was intersected by mud walls from 2 to 4 feet high, and highest nearest the Main Kala and at the enclosure in front of the Volunteers' Kala, which received afterwards the name of the "Shirván Redoubt." Thus the capture of the Grand Duke's position would afford us many advantages of cover, all the more so as the enemy had no guns.

The following orders were issued for the storming:—

"This day, the 29th December 1880 (10th January 1881), the enemy's position, called the Grand Duke's Kalas, is to be captured by the troops of the right attack under Colonel Kuropátkin.

"On the capture of the kalas, the troops will advance no further, but will fortify themselves in them and await further orders.

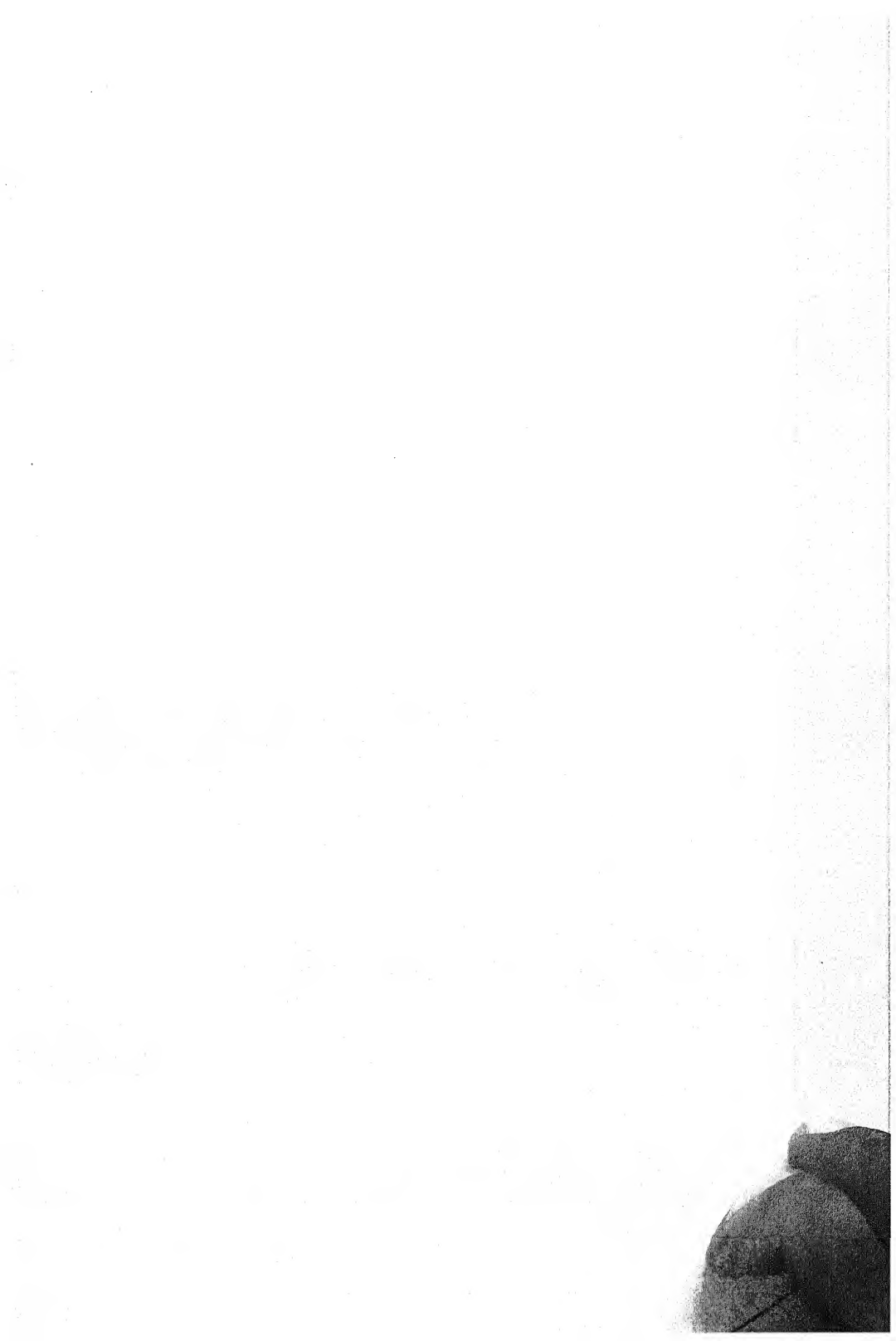
"Half a company of Sappers and the Naval volunteers will be placed under Colonel Kuropátkin's orders.

"The attack will begin at 2 P.M.

"For an hour before the attack, the interior of the fortress will be heavily bombarded, and for half an hour before the storming parties advance the Grand Duke's Kalas will be fired at, the bombardment of the interior of the fortress being continued according to verbal orders given by me to the Commander of the Artillery.

"The reserve under my orders at the Olga Kala will consist of two companies of the 3rd Stavropol Regiment, three companies of the Sámur Regiment, the Trans-Caspian Local Battalion, the 4th Battery of the 19th, the 4th Battery of the 20th, and half of the 1st Battery of the 21st Brigade, the division of

* See Plan of the storming of the Grand Duke's Kala on the 29th December 1880 (10th January 1881).—*Author.*



forced to evacuate the kala by the 2½ batteries of the reserve, while the fire of the 3rd Battery 19th Brigade prevented the enemy from gathering at any point on the wall.*

For the storm of the Grand Duke's position, Colonel Kuropátkin told off three columns—the first, under Prince Golitsin, Aide-de-Camp, consisting of three companies (Voropánoff's volunteers and the 2nd and 3rd Companies of the Shirván Regiment) and a detachment of miners with pyr-oxyline mines; the second, under Major Bogayevski, composed of two companies (the 1st of the 13th and the 2nd of the 5th Turkistán Line Battalions) and two naval mitrailleuses; and the third, under Major Sivinís, of two companies of the 3rd Battalion Shirván Regiment to act as a reserve to the others. Two companies, the 4th of the Shirván Regiment and the Rifle Company of the 13th Turkistán Battalion, with a *sotnia* of dismounted Cossacks, formed a general reserve.

Prince Golitsin's column was directed to capture the Main Kala first of all, and, if it could be done without too heavy losses, the other two also. By 1 P.M. it was formed up in the parallel. Major Bogayevski's column was to support the first, and the general reserve, with a company in Redoubt No. 2 and a company and a *sotnia* in the demi-parallel, were to fire on the crest of the wall of the fortress to support the storming columns. Colonel Kuropátkin assembled the commanders of columns and those of companies of the leading column, and fixed an object for each company. The company commanders, in their turn, acquainted their officers and men with the task before them; and it was explained to all that we did not now intend to undertake a general storm. All officers and non-commissioned officers were requested to get up out of the trenches to survey the ground they were to attack over.

At 3 P.M., when breaches of sufficient dimensions had been made in the walls, Colonel Kuropátkin gave orders for the advance, and sent a report of this to General Skobelev. Prince Golitsin's column moved quickly out of the trench, formed in one line of columns of half companies, and advanced on the Main Kala, at first in quick time, and afterwards at the double. Colonel Kuropátkin went with this column. The distance from the demi-parallel to the Grand Duke's Kala was 300 paces.

The attacking companies were met by a heavy fire from the walls of the fortress, the traverses in front of the entrances, and the Turkistán and Volunteers' Kalas. The company of volunteers on reaching the Main Kala and finding it in ruins, passed round it to the left, and advanced on the Volunteers' Kala, which it occupied, the few defenders in it bolting. The 2nd and 3rd Companies of the Shirván Regiment, who advanced simultaneously with the volunteers, rushed up to the Main Kala, and occupied the mud walls near the stream and to the left of the Volunteers' Kala. When this was done, the 2nd Company received orders to occupy the Turkistán Kala, which it did, cutting down the few Tekkes remaining in it; after which the company was placed along the mud wall to the left of the kala and in the ditch, as there were no loopholes for musketry in the kala. Half of the 3rd Company of the 5th Turkistán Battalion on coming up joined it in this position.

* The artillery in the trenches had much to do with the success of the affair. The three mortars in the mortar battery fired from the second parallel on the interior of the kalas at 460 yards; No. 1 Mobile Battery (3 guns in No. 1 Siege Battery, 1 in Redoubt No. 2, and 2 in the Right Flank Kala) and No. 2 Mobile Battery (3 guns in No. 3 Siege Battery and 2 in Redoubt No. 1) took part in making the breach and bombarding the fortress; No. 3 Mobile Battery (4 guns of which were in No. 2 Siege Battery) helped to make the breach, and when this was done assisted the 3rd Battery 19th Brigade in enfilading the eastern wall and firing on the gates. The rocket battery fired on the enemy running from the kalas to the fortress.—*Author*.

The enemy, who had concealed themselves in masses behind the traverse opposite the Turkistán Kala, threatened our troops with lances and swords; but the volleys of the companies gave them no chance of advancing.

In rear of the first column Major Bogayevski's troops came up with bands playing and occupied the Main Kala, sending half a company up to the Turkistán Kala. Notwithstanding the arrival of the second column, the enemy continued to cause us heavy loss, and even tried to make a sortie from the traverse against our right flank; but this was beaten off by the artillery and the mitrailleuses brought up by the second column. The small-arm fire grew heavier and heavier, and in consequence of the proximity of the enemy, who in places were only 100 paces off, we suffered considerable losses, and every second expected the enemy to make a sortie with heavy masses. Colonel Kuropátkin, therefore, called up Major Sivini's reserve and placed it in the Grand Duke's Kala, and the Commander of the Expedition, who was observing the course of the action from Redoubt No. 1, sent two companies of the Sámur Regiment to the Grand Duke's position and brought two others up to Redoubt No. 1. The Sámur companies, on arriving at the Grand Duke's Kala, were sent back to camp to avoid too great crowding of troops in the kalas.

At 5 P.M. Colonel Kuropátkin wrote to the Commander of the Expedition:—"All three kalas forming the Grand Duke's position have been occupied with insignificant losses. We are beginning to put them in a state of defence. Two mountain guns, cartridges, and water would be acceptable till we can reach the latter. The enemy occupies the garden beyond the kalas, the wall and the traverses covering the entrances, and his fire is heavy. We hope to cause the enemy serious loss. It would be desirable if the artillery fire could be continued on the wall opposite the position occupied by us. I have five sections (1½ companies) in reserve and two as local supports, and do not require reinforcements. Once more I ask for water to be sent."*

Water and cartridges, the latter on camels, were at once sent up, but mountain guns were only sent when twilight came on. On the occupation of the kalas, the walls on the side nearest the enemy were soon pierced by the sailors and sappers with pyr-oxylene mines and dynamite, and banquettes were thrown up.

About 5 P.M. firing ceased. The capture of the Grand Duke's Kalas had cost us 1 officer (Lieutenant Nelaipoff) and 14 men killed, and 4 officers (Prince Golitsin, Aide-de-Camp, Staff-Captain Bartosh, Sub-Lieutenant Voinoff, and Ensign Vagaboff) and 34 men wounded. Besides these, eight hospital attendants of the Red Cross Society, who were with the storming columns, were killed and wounded, making the total loss 61.†

The storming of the Grand Duke's Kalas presented no special difficulties, as it was well prepared by the fire of a numerous artillery; but in a moral sense it was the most important act of the whole siege, as it deprived the enemy of all initiative.

In order to consolidate the whole position, Colonel Kuropátkin proceeded to at once unite all three kalas by trenches; and the enclosure with mud walls in front of the Main Kala was prepared for defence by small arms. In the Main Kala arrangements were made for mounting two mountain guns; a trench, 63 yards long, was made along the wall running from the right front angle of the Main Kala to the left rear of the Volunteers' Kala, and

* Report No. 179.—*Author.*

† Report from Colonel Kuropátkin to the Commander of the Expedition, No. 516, dated 13th 25th) February 1881.—*Author.*

communication was opened between the Volunteers' and Turkistán Kalas by a trench along the stream.

During the night of the 29th and 30th December 1880 (10th and 11th January 1881), the Commander of the Expedition ordered the newly-captured position to be united by a communication with the second parallel. This trench, which was 470 yards long, was finished to a sufficient depth by dawn after great exertions. On this night the Grand Duke's position was occupied by ten companies, two naval mitrailleuses, and two mountain guns, holding the three kalas and the little garden in front of the Main Kala, while the dam, which had been occupied during the action by Lieutenant Lemkul with 25 men of the Shirván Regiment, was evacuated at nightfall, as it was too isolated. Two companies, a squadron of Dragoons, a *sołnia* of Cossacks, and two horse mountain guns, under Prince Eristoff, were left during the night at Redoubt No. 1, to act as a support to the right flank. About 10 p.m., on receipt of news that large bodies of Tekkes had moved into "Petrúsevitch's Garden," and that there were signs of a sortie against the Right Flank Kala being prepared for, General Skobelev ordered Prince Eristoff with the cavalry and horse mountain guns to move to the Right Flank Kala, and thence make a careful reconnaissance.* This officer reconnoitred as far as "Petrúsevitch's Garden," and finding no enemy in it returned to the Right Flank Kala,† after which he received orders to return to camp.‡

The whole night was passed in expectation of a sortie, but apparently the Tekkes were profoundly impressed by our proximity to the fortress, for they attempted nothing and only kept up a dropping-fire. On the 30th December 1880 (11th January 1881), the call of the *muazzin* to prayers was not even heard.§

The works during the daytime of the 30th December 1880 (11th January 1881) in the Grand Duke's position consisted of completing its defences and constructing traverses and communications between the Main and Volunteers' Kalas. The Tekkes kept up a heavy fire on us all day from loopholes made during the night in the parapet on the rampart of the fortress, and, in addition, they made a trench in the dam to drain off the water into the ditch of the fortress. To stop this, Colonel Kuropátkin sent Lieutenant Lemkul with 25 men of the Shirván Regiment to occupy the dam again and hold it. Lemkul accomplished this duty without loss, and, with the aid of the gabions and sandbags he had brought with him, established himself on the dam.

On the 30th December 1880 (11th January 1881), measures were taken for keeping a watch on the enemy; and this was easier for us, now that the Volunteers' Kala was occupied, as from its tower almost the whole of the interior of the fortress could be seen. According to Bogayevski's proposals, observatories were established in the Volunteers' and Right Flank Kalas, the object being to have a plan made of the interior of the fortress to determine the strength of the garrison by counting the number of *kibitkas*,|| to observe all movements among the garrison, the arrival and departure of men, horses, and camels, to

* Instructions to Prince Eristoff, No. 48, dated 29th December 1880 (10th January 1881) 9-45 p.m.—*Author*.

† Report from Prince Eristoff, No. 93, dated 30th December 1880 (11th January 1881), 7 a.m.—*Author*.

‡ Instructions to Prince Eristoff, No. 50, dated 30th December 1880 (11th January 1881).—*Author*.

§ Sheman's Report, No. 30.—*Author*.

|| An approximate calculation of the population of Dangil-Tapa was made by Captain Melnikski of the General Staff on the 28th December 1880 (9th January 1881) based on an eye-sketch of the fortress (see Appendix No. 78).—*Author*.

note the point of impact and effect of all projectiles, and to give timely warning of a collection of men for sorties. Major Bogayevski was named Superintendent of the Observatories, and one officer and several men who had volunteered for this service were given him as assistants.* Several times a day circumstantial information was received from the observatories, which proved most valuable.†

During the night of the 30th and 31st December 1880 (11th and 12th January 1881), the Commander of the Right Attack was ordered to finish the fortifications of the Grand Duke's Kalas, and, if possible, also establish himself on the dam in front of them. Colonel Kozelkoff was ordered to construct a demi-parallel from the communication to the Grand Duke's Kala with a redoubt at the end of it.‡

On the evening of the 30th December 1880 (11th January 1881) news was received from the observatory on the tower of the Volunteers' Kala that the Tekkes were preparing for a sortie at night, and were massing their forces in the ditch of the fortress. Lieutenant Sheman also reported that men sent 350 paces forward by him had heard orders being given in the fortress to fire on the Grand Duke's Kalas, and cries of "Forward all, once more! To close quarters!"§. Firing had actually begun, so orders were given for increased vigilance to be used. A reserve of all arms was brought up to Redoubt No. 1, and Cossack patrols were sent out between the Grand Duke's Kalas and Redoubt No. 1 and towards Opornoye.

The success of their sortie on the 28th December 1880 (9th January 1881) had encouraged the enemy to make another, and 6,000 men had volunteered for it, and were accompanied by a number of women with sacks for plunder.||

At dawn on the 30th December 1880 (11th January 1881), Taghma-Sirdár had sent his son Akh-Verdi with a few horsemen to inspect the ground in rear of the Russian camp, as his idea was to strike a grand blow, on their return, with his cavalry. On receiving news that the rear was fortified, Taghma sent Kájár-Topás-Khán, with the Marvli, to make a demonstration against the rear, while the main blow was to be struck against our left flank. Those, therefore, who desired to participate in the attack were assembled in the place of arms near the Mill-Kala.

It was about 9-30 p.m. when single shots, and then volleys, were heard on the left flank of the siege works, and at the same time the yells of large masses of Tekkes burst forth. The enemy made an attack on the left flank of our siege works, threatened the left of our position, and shewed his forces opposite the Turkistán Kala, in rear of the camp, and opposite the Cavalry and Right Flank Kalas.

The artillery in the siege batteries and in camp opened fire on the interior of the fortress and on the advancing masses of the Tekkes, and some of its shells caused some loss among our own people in the unavoidable confusion of a hand-to-hand fight.

* The observers on the tower of the Volunteers' Kala were Non-Commissioned Officer Alexander Alfons of the Shírván Regiment, Private Vladimir Jemchujnikoff of the 13th Turkistán Battalion, and Lance-Corporal Nicholas Lukin of the 2nd Ural Cossacks.—*Author*.

† In Appendix No. 79, see Form for the record of observation at Station No. 1 between the 3rd (15th) and 10th (22nd) January. The first which contained the observations up to 3rd (15th) January was lost during the storming of the fortress on the 12th (24th) January.—*Author*.

‡ In Appendix No. 80, see General Skobelev's instructions to Colonel Kuropátkin sent at 8-27 p.m. on the 30th December 1880 (11th January 1881).—*Author*.

§ Lieutenant Sheman's Reports, Nos. 26 and 32.—*Author*.

|| See Plan of Tekke sortie on the 30th December 1880 (11th January 1881).—*Author*.

On the first shots being fired, General Skobeleff brought up the 1st Company of the Sámur and the 16th of the Dagishtán Regiment from the camp to the first parallel, and placed them in Redoubt No. 3, where a stubborn fight was raging; and they were soon afterwards reinforced by the 12th Company of the Stavropol Regiment, a division of the 4th Battery 19th Brigade, and half a *solnia* of Taman Cossacks. The arrival of these troops forced the enemy to retire on the fortress. The main attack of the enemy was delivered on the left flank redoubt (No. 3), in which were the 3rd Company of the Trans-Caspian Local Battalion and two mountain guns of the 6th Battery 21st Brigade, and on the rear of the first parallel. The 2nd Company of the Local Battalion held Siege Battery No. 2 (in which were four 4-pounder guns) and the trenches near it.

The 3rd Company held out for some time against the attack; but on the death of its commander, Lieutenant Yanovski, and when a considerable number of its men and of the gunners with the mountain battery had been killed, it was forced to withdraw. The 2nd Company did not go to the assistance of the 3rd, and the redoubt was occupied by the enemy; but the reserve, which had been hurried up, was thrown against the Tekkes, and recaptured the redoubt and one mountain gun, the other having been already carried off. With his gun, the No. 1, Bombardier Agafon Nikitin, was taken prisoner. Next day the enemy tried to force him to fire from the captured guns; but on his refusing to do so, they first cut off his fingers, then his ears, and, finally, tore the skin off his back. Notwithstanding these tortures, Nikitin still refused to do as they required, and they then cut off his head.*

The attack on the left flank of the camp was beaten off by the Commander of the 3rd Battalion Apsheron Regiment, Popoff,† who checked the enemy's advance by causing his battalion to fire volleys at point-blank range. The rear of the camp was defended by mixed detachments of cavalry, servants, and non-combatants, and the Cavalry Kala was held by the detachment of twenty men of the 3rd Battalion Sámur Regiment posted in it.‡

The attack on the Right Flank Kala was made partly from the rear and partly from the left flank. It must be remarked that on the 29th December 1880 (10th January 1881) water had been let into the ditch in front of the trench round the kala; and the ground in rear of it was so inundated, that it was hardly possible to move about, and quite impracticable to approach unperceived, except by one narrow path. The advance of the enemy on the night of the 30th December 1880 (11th January 1881) was noticed in time, and one of the guns was brought round to the gorge. On the enemy approaching to within 70 paces, a salvo was fired at him from this gun and the mitrailleuses, and he retired without reaching the kala. Lieutenant Sheman reported that after the enemy's defeat, his rage was frightful to see. Some called out to retire into the desert, and others were for a second attack, but it ended by their all retiring.§

After the defeat of the sortie, voices were heard in Dangil-Tapa crying out, "Our land is lost"; and again the Tekkes made an attempt, but a feeble one this time, to advance. Shouts were heard as of men moving into the

* Agafon Nikitin, a peasant of the Government of Suvalki, district of Kalvari, parish of Urdomin, village of Kibarivo, entered the service on the 22nd November (4th December) 1875. He was 27 years of age (Reports from Lieutenant-Colonel Bobrikoff, Nos. 418 and 431, dated 18th (30th) March and 22nd March (3rd April) 1881; General Skobeleff's telegram to the Assistant of the Commander-in-Chief, No. 2867, dated 22nd March (3rd April) 1881).—*Author*.

† For this distinguished conduct, he was decorated with the Cross of St. George.—*Author*.

‡ Report from Colonel Haidaroff, Camp Commandant, No. 2 of 1881.—*Author*.

§ *Morskoi Sbornik* of 1882: "Part taken by the Marine in the Akhál-Tekke Expedition of 1880-81."—*Author*.

desert, and also the bleating of sheep and the roaring of camels. In order, therefore, to find out what was going on in the fortress, Colonel Kuropátkin called for volunteers. Five men of the Shirván Regiment approached the traverse near the wall of the fortress, and one of them climbed on it and saw some gatherings of Tekkes, camels being loaded, &c., and all that the volunteers had reported, for the Tekkes were preparing to move into the desert. In bringing this circumstance to the notice of the Commander of the Expedition, Colonel Kuropátkin added—"If the evacuation has begun, I can gather four or five companies with two guns and start in pursuit." The cavalry under Prince Eristoff were sent next day into the desert to the north of the fortress to ascertain what truth there had been in these reports, but found nothing to confirm them.

On the attack being repulsed, all the artillery began to bombard the interior of the fortress, and continued their fire till dawn, while the infantry fired some volleys (indirect fire).

About midnight, when the enemy were no more to be seen anywhere outside the fortress, General Skobelev ordered "the works to be carried on as if nothing had happened and everything to be finished by dawn." During this night the communication between the second parallel and the Main Kala on the right attack was finished, and Kozelkoff finished a demi-parallel on the left attack. The communication to the Main Kala was arranged for musketry fire, so that Colonel Kuropátkin's main reserve in this kala could not now be cut off, and his position was thus secured as far as fortifications went. Rocket troughs were placed on the tower of the Volunteers' Kala. The demi-parallel constructed on the left attack was occupied on the morning of the 31st December 1880 (12th January 1881) by riflemen, whose fire forced the enemy to evacuate the horse-shoe, and also to retire into the ditch of the fortress from the trenches in front of the south face.

Our losses on the 30th December 1880 (11th January 1881) were 1 officer (Lieutenant Yanovski of the Trans-Caspian Local Battalion) and 52 men killed; 2 officers (*Yesaul* Nujevski of the Siberian Cossacks and Staff-Captain Kharkevitch of the Shirván Regiment) and 96 men wounded. As on the 28th December 1880 (9th January 1881), almost all the killed and wounded had fallen before the sword or lance, and the heads of the dead were cut off.

The enemy, according to his own account, did not lose many men, but the gun taken served as a proof of the great losses of the Russians, and hopes rose high that we would retire. But great was the dismay of the Tekkes when next day they saw that our camp had been moved close up to the first parallel. "The Russian Sirdár," said they, "sticks as close to us as a shirt to the body."

This move of the camp up to the first parallel was necessary to bring the troops nearer to the siege works, so that if, on the one hand, the enemy made another of his usual sudden attacks, the reserves might be closer at hand; and, on the other, if separate attacks were made on the camp and on the siege works, the reserves might not be paralyzed. The front and flanks of the camp were thus protected by the siege works, but the camp itself was under heavy fire of musketry from the wall.

The troops were occupied during the whole of the 31st December 1880 (12th January 1881) in moving camp; and to afford the men some cover from bullets on the new ground, orders were issued to sink the *kibitkas* and *yulameikas* into the ground and to throw up banks of earth round them. As, however, the troops usually returned to camp wearied with hard work, the *yulameikas*

remained till the end of the siege with only slight protection of this kind, and many had not even that. The camp was pitched in very close order, so as to be more easily defended in the event of a night attack; and *yulameikas*, carriages, horses, hospital stores, and depôts were crowded close together, and only in places were narrow passages left. The camp, therefore, presented a good object to aim at, and accordingly till the end of the siege there were daily losses in it, especially among the horses.

On the 30th December 1880 (11th January 1881), *i.e.*, before the second sortie, the Commander of the Expedition inspected the ground in front of the trenches of the left attack; and the results of this were the following proposals for subsequent works. Colonel Kozelkoff was to open a demi-parallel from the communication to the Grand Duke's Kala, cross the stream, and make a strong redoubt at about 35 yards from it, the object of this being to approach the horse-shoe. The danger, however, of this proceeding was that the enemy might make an attack on the left flank of the trench from the "ice-cutter." During the nights of the 31st December 1880 and 1st January 1881 (12th and 13th January 1881), when darkness came on, Kozelkoff was to occupy the horse-shoe, connect himself by a parallel with Kuropátkin's left flank on the dam, open a communication to the rear, and extend to the left towards the Mill-Kala, which was to form a *point d'appui* for the left flank. Colonel Kuropátkin was to continue to strengthen his position in the kalas and on the dam. General Skobelev made these proposals, because the enemy utilized the space between the horse-shoe, the redoubt at the end of the trench leading from the "ice-cutter," the Mill-Kala, and the retrenchments on the sandhills to the north of it, as a large place-of-arms in which they could gather for sorties.

In order to ascertain whether such a great extension of the siege works to the left was necessary, in the afternoon of the 31st December 1880 (12th January 1881) General Skobelev, with the Chief of the Staff and the Commanders of the Engineers and Artillery, made a reconnaissance of the ground again, and the reasons *pro* and *contra* were thus summed up by Grodekoff:—

- (1) The action of the 30th December 1880 (11th January 1881) has clearly shewn that our siege works are too extensive for the number of troops we have to guard them.
- (2) To continue the approaches on the left attack without occupying the Mill-Kala is impossible, whilst operations against the latter will demand considerable means, and force us to trust a good deal to luck.
- (3) The garrison of the Mill-Kala would have to be quite isolated, and communication with it could only be risky and to be carried on at night. To connect the Mill-Kala with our works would lengthen our trenches by 930 yards.
- (4) Even if the Mill-Kala were occupied, the trenches would still be outflanked by the enemy's entrenchments to the north.

On considering our position and the results of the reconnaissance, the Commander of the Expedition judged the following measures necessary:—

- (a) To stop further advances on the left attack, and only put its works in such a state that they should fulfil a defensive rôle.
- (b) To take as our front the Grand Duke's Kalas, the dam, and the Grand Duke's stream, and use the parallels only as communications. This front to be flanked by Redoubt No. 3, Battery No. 2, and Opornoye.

- (c) To concentrate all our energies in pushing forward the approaches from the right attack and begin mines to blow down the wall.
- (d) Besides the breach produced by the mines, to have another breach made by the artillery at the south-east angle of the south face of the fortress.
- (e) To convert Redoubt No. 3 into a very strong profile to prevent escalade, and arm it with heavy guns.
- (f) To construct a place-of-arms for three companies and four guns near Redoubt No. 3 and Siege Battery No. 2.
- (g) To make a redoubt with flanking trenches for 40 men between the first and second parallels on the right bank of the Grand Duke's stream, and also to throw up a trench on the bank of this stream between the second parallel and the demi-parallel made during the night of the 30th and 31st December 1880 (11th and 12th January 1881).
- (h) As on our left we had to act purely on the defensive, Opornoye had attained special importance, because it flanked the approaches to the position. In it, therefore, heavy guns should be placed.
- (i) To occupy on the 2nd (14th) January the dam opposite the Grand Duke's Ka'as.

According to these arrangements, the Commanders of Engineers and Artillery were directed—the former to choose the objects to be attacked, and report on the means required; and the latter to draw up a plan for the artillery operations after a careful survey of the south face and south-east angle of the fortress, with a view to breaching it, paying special attention to General Zinovieff's letter upon breaching the walls of Central Asian fortresses.*

In consequence of the above resolutions, the works on the left attack assumed a purely defensive character, the communications between the parallels were strengthened, and Redoubt No. 3, whose name was changed to "Stavropol Redoubt," was made into a strong place-of-arms. On the right attack, after a short interval, the approaches were pushed on with the former energy.

By the 1st (13th) January 1881 the following results had been obtained:—Trenches of strong profile and communications extending altogether $3\frac{1}{2}$ miles, three redoubts, and five batteries had been made; the Opornoye, Olga, Right Flank, Grand Duke's, Volunteers', and Turkistán Kalas had been seized and put in a state of defence; and our right attack was only 95 and our left 175 yards from the wall of the fortress. These works were, however, deficient in the following respects in consequence of the haste with which they had been constructed:—The whole did not form a strong position with fully protected flanks; the narrow and deep trenches had no exits to the rear; there were no places-of-arms for the reserves, or good openings to the front covered by traverses; the communications were insufficient; the distribution of the artillery was not systematic; no good instrumental plan had been made of the siege works, and the environs of the fortress, and finally the camp, was not in order.

All these deficiencies were brought forward by different officers at a meeting held by the Commander of the Expedition on the evening of the 1st (13th) January; and it was proposed to reduce all the works to a system before making any further advances, to provide for the defence of the flanks of the strong redoubts at the extremities of the works (*e.g.*, by military pits), to construct

* Instructions to Colonel Rutkovski and Colonel Verjbitski (? Bronitski.—*J. M. G.*), Nos. 3 and 4, dated 1st (13th) January 1881.—*Author.*

a new redoubt on the right extremity of the second parallel, leaving Redoubts Nos. 1 and 2 to defend the right flank of the camp, to form a place-of-arms for the reserves, to bring the camp into order and provide works for its protection, to prepare a large number of gabions, fascines, and sandbags for the subsequent works preceding to the capture of Dangil-Tapa according to the plan which had been worked out, and in no case to trust to an assault made when a breach in one front only was available.

However weighty these considerations might be, and however desirable it was to reduce everything to a system, there were other circumstances still more important which did not permit of the further advance being delayed for a whole week—the time which was considered necessary for carrying out all the above works. It was necessary to hurry on the siege at once for the following reasons. Although on the occasion of each sortie we had promptly advanced our works, and although the initiative still remained on our side, there remained the incontrovertible fact that we had lost a colour and two guns, which in the eyes of the Tekkes was a proof of their victory over us. These reports were carried to the rear and gathered in bulk till there was a danger of the rumours of our losses turning the heads of the Trans-Atrak Yamúts, and reliable information was received from the rear that not only were the Yamúts following attentively what passed before Gok-Tapa, but were quite ready to rise as one man and attack the posts along our lines of communication at the first opportunity.

Between the 20th and 31st December 1880 (1st and 13th January 1881), the following troops arrived in camp:—22nd December 1880 (3rd January 1881), 11th and 12th Companies Apsheron Regiment, 1 division 1st Battery 21st Brigade; 25th December 1880 (6th January 1881), 15th and 16th Companies Daghistán Regiment, 1 division 1st Battery 21st Brigade; 28th December 1880 (9th January 1881), 9th and 10th Companies Apsheron Regiment, and four 4-pounder guns of 1st and 3rd Mobile Batteries taken from the armament of Sámurskoye; and 31st December 1880 (12th January 1881), a mixed company (120 men) of the Railway Battalion—in all 1,000 bayonets and 8 guns, of which latter the Commander of the Expedition had only previously reckoned on four. During this time we had lost 25 officers and 430 men killed and wounded, which could only be replaced by drafts from the west coast of the Caspian, and in no case by bringing up men from the lines of communication. It was possible to abandon Kalát, and thus gain one company, and also to bring up a company and a *solvnia* from Sámurskoye and a company from Bámi, as the whole attention of the enemy was directed to the defence of Gok-Tapa; and on the lines of communication there had only been two cases of camels (100 in all) being driven away from the pasturages near Bámi on the 21st and 22nd December 1880 (2nd and 3rd January 1881), and these were recaptured by the Orenburg Cossacks.

The railway was still far from Gok-Tapa,* so it could have no influence on operations before the fortress, and every day brought us more losses, while the task of storming Dangil-Tapa still rose before us.

The duties of the troops in the extensive trenches were very heavy. Every loss among the men put more work upon those who were left in the ranks. Moreover, these survivors were evidently becoming worn out. The affairs of the 28th and 30th December 1880 (9th and 11th January 1881) were not without an influence upon the *morale* of certain weaker spirits, and the delay in

* The railway had advanced to Bála-Ishem, where the works had to be stopped for want of sleepers. The Décauville line ran to Aidin.—*Author.*

the advance had a bad effect on a great number of the men. The sortie of the 30th December 1880 (11th January 1881) had made such an impression on the troops that the exultation produced by our success on the 29th December 1880 (10th January 1881) had been somewhat subdued.

The Commander of the Expedition, therefore, resolved to push forward the siege without delay and with the utmost energy. The mining works were also to be begun, and General Skobelev requested Rutkovski to point out to him on the ground at 8 A.M. on the 2nd (14th) January where the mines were to begin, what their object was, and how they were to act. At the same time he ordered special care to be taken in the preparation of the necessary materials for pressing the siege vigorously forward, such as gabions, fascines, sandbags,* &c., with a view to crowning the breach and rampart; and all these materials were stored in the Grand Duke's Kala. At the same time, as the mining gallery was being pushed forward, a redoubt was to be built to the right of the mortar battery, the Stavropol star redoubt was to be completed, a redoubt for 40 men thrown up between the first and second parallels and the reserve's position, the camp was to be fortified, the *kibitkas* sunk into the ground, the artillery preparations for breaching made, and the enemy's attention was to be drawn away from the camp by a heavy fire being kept upon him from the advanced trenches. Enquiries were made as to which of the officers and men had distinguished themselves on the previous day.† It was resolved to trust more to cavalry outposts during the dark nights‡ and light up the ground in front by Shpakovski-Tabulevitch lamps and by firing rockets. Rations for ten days were to be set apart, the transport of supplies from the rear to be attended to,§ enquiries made as to how far we could reckon on aid from Persia at a pinch, and by what means two weeks' supplies for 8,000 men and slaughter-cattle were to be brought up from Báni to Gok-Tapa. The Commander of the Lines of Communication was directed to send up to Gok-Tapa as many infantry as he could spare, the removal of the sick was to be carried out as speedily as possible, and two guns were to be sent up from Kalát. "I refuse to listen to all who are inclined to delay the siege," wrote General Skobelev at 6-30 p.m. on the 1st (13th January), "and will not permit of any operations which might put off the storming of the place. Forward! Forward!! Forward!!! God is with us! No writing, only fighting!" "Your Excellency has personally seen the state of affairs before Gok-Tapa," wrote General Skobelev to

* The Superintendent of the supply-depôt was ordered to issue no more sacks to the troops, but hand them over to the Engineers. Orders were sent to our Agent, Lieutenant Krishtopeiko, at Garm-Ab to prepare and send up 4,000 sandbags.—*Author.*

† General Skobelev repeated General Suvoroff's words: "Good is best done quickly."—*Author.*

‡ General Order, Siege Force, No. 8, dated 2nd (14th) January 1881.—The cavalry were to perform this duty in the following manner:—Picquets of 30 men under an officer were to be placed at the Grand Duke's Kala, a *sotnia* at the Right Flank Kala, and a *sotnia* in Opornoye. These were to send out patrols of not less than 15 men from the Grand Duke's to the Right Flank Kala; the same from the Right Flank to the Grand Duke's Kala, and also from the former to the Olga and Cavalry Kalas, and to Kalas Nos. 1, 2, and 3 occupied by us.

From Opornoye patrols were to be sent out on one side to meet those from the Right Flank Kala at Nos. 1, 2, and 3 and the Cavalry Kalas, and on the other to the left flank of Colonel Kozelkoff's advanced parallel. All these patrols were to have trumpeters; and if enough men were not available, the Commander of the Artillery was to detain some of his. Colonel Artsishevski and Prince Eristoff were to relieve each other in charge of the cavalry outposts, or whichever of them was on the ground was to take command.—*Author.*

§ On the 1st (13th) January 1881, the following was the quantity of supplies in the Báni supply-depôt:—Rye flour 4281·6 cwt., biscuits and cakes 5275·2 cwt., buckwheat groats 5,280 cwt., oats 393·6 cwt., horse biscuit 1,952 cwt., salt 576 cwt., wheat flour 864 cwt., rice 752 cwt., tea 7·36 cwt., sugar 40·96 cwt., spirits 1,620 gallons, cabbage 31·68 cwt., fruit acids 203·2 cwt., and ghee 9·6 cwt. (Diary of the 3rd Section of the Staff of the Trans-Caspian Field Force, Part II, No. 28 of 1880, page 181).—*Author.*

Annenkoff.* "In any case it is impossible to raise the siege, and the last man will be sent forward to storm the place. There can be no retreat from before Gok-Tapa. Therefore, I request you to help us with all your energy and in accordance with circumstances."

On Colonel Kuropátkin being asked how many companies he required to hold the Grand Duke's position, the dam, and the second parallel and mortar battery as far as Redoubt No. 2 inclusive, he replied twelve.† As at that time the main feature of the siege was the preparations to advance from the Grand Duke's position, to relieve the Commander of the Right Attack from all anxiety as to his communications with the rear as far as the Olga Kala and enable him to superintend the works more easily, the Commander of the Expedition formed the Grand Duke's position and the second parallel as far as Redoubt No. 2 inclusive into a special section, called it the Central Attack, and placed Colonel Kuropátkin at the head of it, putting twelve companies and a *sotnia* of dismounted Cossacks at his disposal.‡

The other siege works on the right flank, the Olga and Right Flank Kalas, with the two companies of the 3rd Sámur Regiment and the 4th Apsheron Regiment in them, were formed into the new right attack and placed under Colonel Navrotski, whose orders were to cover the right flank of the camp, and act against any enemy attempting to advance on the right of the Grand Duke's position, the mortar battery, or Redoubt No. 2, and hold, in case of necessity, the Right Flank and Olga Kalas. The importance to us of the latter was specially pointed out to him, as in it, till a suitable place had been prepared in camp, our powder and dynamite were stored. Colonel Navrotski was allowed to place the 4th Apsheron Regiment in Redoubt No. 1 or in the general camp, as he thought fit. As the tactics of the enemy were generally to make unexpected attacks, the importance of keeping up a thoroughly efficient service of cavalry patrols from the left flank of Kozelkoff's advanced position round the camp by the Right Flank Kala to the Grand Duke's Kala was impressed upon him. For this purpose half a *sotnia* of Cossacks was ordered to be put at his orders daily.

Colonel Kozelkoff was left in charge of the siege works on the left flank with the 3rd Stavropol Regiment and the Trans-Caspian Local Battalion under his orders. The general reserve consisted of 17 companies, 30 guns, and, all the cavalry, except the dismounted *sotnia* placed under Kuropátkin's orders§ and was concentrated in the general camp at the disposal of the Commander of the Expedition. The Sapper and Railway|| Companies were placed at the disposal of the Commanding Engineer.¶

* The Commander of the Lines of Communication came up from Sáumarskoye for one day, 30th and 31st December 1880 (11th and 12th January 1881), to Gok-Tapa to report to the Commander of the Expedition as to the state of matters in rear, and ask for orders on some points.—*Author*.

† Supposing that every day four of them would be allowed to rest in camp (Colonel Kuropátkin's Reports, Nos. 199 and 203).—*Author*.

‡ 1st and 3rd Shirván Regiments, 1st and Rifle Companies of 13th and 3rd Company of 5th Turkistán Line Battalion, Sub-Lieutenant Voropánoff's volunteers, and a dismounted *sotnia*, made up of the 1st *Sotnia* Orenburg and 5th *Sotnia* 2nd Ural Cossacks.—*Author*.

§ 3rd Apsheron, 4th Daghistán, and 1st Sámur Regiments, 1st and 2nd Companies Daghistán and two companies 3rd Sámur Regiment, Tserenjaloff's volunteers, mixed Cossack regiment (4 *sotnias*), Cavalry Reserve (2 squadrons, 1 *sotnia*), combined *sotnia* of the Turkistán Force, 3rd and 4th Batteries 19th Brigade, 4th Battery 20th Brigade, half of 1st Battery 21st Brigade, and the Horse Mountain Division.—*Author*.

|| Arrived in camp 31st December 1880 (12th January 1881).—*Author*.

¶ General Order, Trans-Caspian Field Force, No. 1, dated 1st (13th) January 1881; Instruction No. 1, dated 2nd (14th) January 1881.—*Author*.

From the 31st December 1880 (12th January 1881) to the 3rd (15th) January works were constructed to strengthen the flanks and positions for the reserves, and well-covered communications were arranged for. Captain Yablochkoff, Director of Siege Works of the Centre (formerly Right) Attack, was mortally wounded, and Captain Masloff of the Engineers was appointed Director in his place. The works carried out on the central attack were:—*

- (1) The communications with the second parallel and between the kalas were completed.
- (2) In rear of the Main Kala was constructed a place-of-arms for the reserve of trench profile, 35 yards long and 42 feet wide, for two companies of infantry.
- (3) A new entrance to the Main Kala from this place-of-arms was made and the old one blocked up, as it was commanded from the wall of the fortress.
- (4) In front of the Main Kala, to clear the field of fire for the guns, a mud wall was destroyed for a length of 42 yards.
- (5) A garden between the Grand Duke's Kala and the dam which impeded musketry fire was cut down.
- (6) A mining gallery of descent was made from the front wall of the Volunteers' Kala about 10½ feet deep, and from it galleries were driven towards the wall of the fortress, but at the very beginning of the work a gallery was flooded with water and fell in. As it appeared that the distance of the Volunteers' Kala from the wall was greater than the length to which it was proposed to push mines, this work was stopped.

On the right flank (1) the third parallel was united with the second by a trench along the Grand Duke's stream about 220 yards long; (2) the ditch of the Stavropol redoubt was widened to 12 feet and deepened to 5 feet, and the angles of the point nearest the enemy were protected by three rows of rifle-pits; (3) the redoubt was connected with the ravine by a parapet 93 yards long forming the gorge of the place-of-arms.

All this time both sides kept up a constant, though dropping, fire. On our side 29,000 rounds of infantry and 227 of artillery ammunition were expended, and we lost 5 men killed and an officer (Captain Yablochkoff of the Engineers) and 30 men wounded.

In consequence of the considerable distance from the head of the mining works in the Volunteers' Kala to the ditch (120 yards), it was decided to begin them nearer the fortress, and with this object to occupy the dam and the enclosure near the ditch. For this purpose the Commander of the Central Attack detailed the 1st Company of the 13th Turkistán Line Battalion, the 11th Company of the Apsheon and the 9th of the Shirván Regiment, and a detachment of volunteers, with a reserve consisting of the 3rd Company 5th Turkistán Line Battalion, and the 10th, 11th, and 12th of the Shirván Regiment. It was proposed to undertake the works in the following order:—(1) To make approaches to the enclosure (afterwards called the Shirván Redoubt), and cover for the companies destined to occupy it in front of the Volunteers' Kala; (2) to occupy the dam and fortify it; (3) to try to work into the enclosure by using the Tekke's trench; (4) to occupy the enclosure and make provision against enfilade and reverse fire; and (5) to make trenches

* See Plan of siege works from the third parallel, and profiles of the Grand Duke's position and the closer approaches to Dangil-Tapa.—*Author*.

by sap to unite the enclosure with the works on the dam.* All these proposals, except the latter, were carried out on the night of the 3rd and 4th (15th and 16th) January.

During the 3rd (15th) January, the Engineer officers made a closer survey of the enclosure in front of the Volunteers' Kala and of the dam. The former was surrounded by a mud wall $3\frac{1}{2}$ feet high with a side of 70 to 84 feet, and was 58 yards from the wall of the fortress.

On the approach of darkness, the 1st Company 13th Turkistán Battalion occupied the dam, and quickly put it into a state of defence by constructing a banquette and loopholes of sandbags. When the moon rose, the volunteers glided from the ravine into the enclosure, which turned out to be empty, and took post beyond the wall, while small detachments of sappers and working parties from the 10th and 11th Companies Apsheron Regiment followed them, and began the communications between the ravine and the Volunteers' Kala along the right face of the latter. A dam was made on the embankment, and the water turned into its old bed; and near the towers approaches were made from the kala to the embankment. The sappers then advanced in the Tekke trench, and on a level with the rear face of the redoubt made a traverse in it to defilade it from the fire from the wall.

The men who occupied the enclosure were protected by the fire of those sections of infantry who occupied a position between the Turkistán and Volunteers' Kalas, and by that of a mountain gun in the Turkistán Kala, of Battery No. 2, and of Redoubt No. 3 (the two latter enfilading the south-eastern front of the fortress). The enemy did not risk a sortie against our works that evening, but his cries from the interior of the fortress, and the increase in the strength of his fire about 7 p.m., caused the volunteers and the working parties of the Apsheron Regiment to think that a sortie was imminent, and to retire towards the Volunteers' Kala. Order was, however, soon restored, and the men returned to their posts. The covering and working parties in the enclosure were strengthened by half of the 10th Company Shirván Regiment; and Staff-Captain Podvisotski, the commander of that company, was named commandant of the enclosure, which received the name of the "Shirván Redoubt." Three companies were placed under his orders, and a reserve of three companies was also formed.

At 2 a.m. General Skobeleff, with his staff, arrived in the Shirván Redoubt, visited all the working parties under a heavy fire, and expressed himself pleased with all the arrangements made on occupying this advanced position, which were explained to him by Colonel Kuropátkin. By dawn the redoubt was made quite defensible with the aid of gabions and powder-boxes for pack transport, and, in addition, a covered communication had been made between it and the Volunteers' Kala. During the same night the trench uniting the Stavropol place-of-arms with the stream had been turned into an elevated battery for 16 guns. At 3 a.m. on the 4th (16th) the enemy ceased firing, and after that all was perfectly quiet. Our losses on the 3rd (15th) were 2 men killed, and 1 officer (Ensign Abadzieff, Orderly Officer of the Commander of the Expedition) and 14 men wounded. There were expended 203 rounds of artillery and 24,687 (5 per rifle) of infantry ammunition.

On the 4th (16th) January two columns were sent out to forage and cut wood,—one to Yemishán, consisting of 2 companies, 2 heavy guns, and 2 *solnias* of Cossacks under Lieutenant-Colonel Popoff; the other, composed of a company each from the 1st Daghistán and 3rd Sámur Regiment, half a company

* Report from Colonel Kuropátkin, No. 22, dated 3rd (15th) January 1881.—*Author.*

of the Railway Battalion, and a few *jigils*, under Captain Golovkoff, to Sámurskoye. On his arrival Golovkoff was to take 30 waggons of the wheeled transport and supplies to last till the 9th (21st) January, and march to Kalát and Káriz-Nur-Verdi-Khán, where he was to cut wood for scaling ladders,* gather brushwood, and make as many gabions and fascines as he could carry in the waggons, bringing them into camp before Dangil-Tapa on the evening of the 9th (21st).† The waggon transport left Sámurskoye at 9 A.M. under escort of three *soboles* of the mixed Cossack Regiment and two horse mountain guns under Colonel Artsishovski.

At dawn on the 4th (16th) complete silence reigned in the fortress, and there was little movement in it during the morning, the firing being very feeble from the wall. From the tower of the Volunteers' Kala a few women were from time to time seen leaving the *kibitkas*, and several men were noticed, evidently collecting the bullets which had fallen on the open space in front of the fortress ‡ Towards evening reports began to arrive from the observatory that the enemy were collecting in the ditch to make a sortie; and this information was at once communicated to the troops. According to orders issued on the 3rd (15th) January, the usual guard was not posted in the trenches on the approach of darkness, but in rear; for in an action with such a brave enemy the trenches had not the same importance as they would have had in a war with a European foe. By day they served as covered communications, but by night, when the enemy advanced without firing to close quarters, the troops standing behind the parapet had to meet the enemy at the decisive moment under the most unfavourable conditions, *viz.*, when he had mounted on to the superior slope. The Commander of the Expedition had, therefore, ordered that, in the event of a night attack being expected, the guard of the trenches was to take post behind them and fire standing up, so as to prevent the enemy from escalading them. Only sentries and the best shots were posted along the parapet while the guard slept in rear.§

After the sortie of the 30th December 1880 (14th January 1881), a council had been held in Dangil-Tapa, and it had been decided to make another sortie on the 4th (16th) January, on which the defenders of the fortress founded many hopes. All their best men took part in it, and the number of volunteers for it, as the Tekkes told us afterwards, reached 12,000 men. The Utamish were under Akh-Verdi, son of Taghma-Sirdár, and the Tokhtamish under Kájar Topás-Khán and Kul-Bátir-Sirdár. The cavalry was ready to cut up fugitives, and Taghma-Sirdár and the other Kháns took post at the gates of the fortress.||

About 7 P.M. the enemy, taking advantage of the darkness between sunset and the rising of the moon, made an impetuous attack on the left flank of our siege works, the mortar battery, and the position in front of the Grand Duke's Kalas. On the left flank the main attack was met by the 3rd Battalion 74th (Stavropol) Regiment, under Lieutenant-Colonel Tspirinski-Tsekavo.¶ The attack was everywhere brilliantly repulsed, Non-

* The Commandant of Sámurskoye had been ordered to cut down all the wood round the fortress, make scaling ladders out of it, and send them up to Dangil-Tapa (Heliogram No. 31, dated 3rd (15th) January 1881).—*Author*.

† Instructions to Captain Golovkoff, No. 50, dated 4th (16th) January 1881.—*Author*.

‡ Report from Major Bogayevski to Colonel Kuropátkin, No. 3, dated 4th (16th) January 1881.—*Author*.

§ Instructions to the Commanders of the Flanks and Centre, dated 3rd (15th) January 1881.—*Author*.

|| See Plan of sortie on the 4th (16th) January 1881.—*Author*.

¶ Decorated for the repulse of this attack with the Cross of St. George.—*Author*.

Commissioned Officer Krivoborodko of the Stavropol Regiment especially distinguishing himself by the way in which he, with a section of the 12th Company of that regiment, beat off a heavy mass of the enemy from the communication to the Grand Duke's Kala. In the centre the brunt of the attack fell on the salients occupied on the 3rd (15th) January, *i.e.*, on the Shirván Redoubt and the dam. So impetuous was it, that our detached post, lying 70 paces from the dam, had no time to fire a volley, and of its ten men three were killed and three wounded, the rest escaping to our trenches. The Shirván Redoubt was occupied by the Rifle Company of the 13th Turkistán Battalion and 50 Turkistán Cossacks; and the attempt of the enemy to capture this point failed. Seeing the difficulty of charging over our entrenchments, some of the more desperate men tried to seize the bayonets pointed through the loopholes; and one of the Tekkes having in this manner caught hold of the bayonet of a defender of the Shirván Redoubt, cut it off with his sword, but was in his turn shot. At the same time, as the attack was made on the Shirván Redoubt, an attempt was made to capture the dam and to turn its left flank. The dam was occupied by the 4th Company of the Shirván Regiment under Lieutenant Krushovski; and the Tekkes not only succeeded in getting close up to it, but several of them crossed it, and were at once cut down. Others passed round by the left of it, and almost reached the entrance to the Volunteers' Kala, but were promptly bayoneted. The action did not last more than quarter of an hour, and all our losses here and on the left flank were by cold steel.*

Taghma-Sirdar himself tried to lead the Tokhtamish forward again; but their hearts failed them, and they threw down their arms and ran into the fortress, from which they opened a heavy fire on the troops standing in the open behind the trenches. The orders given to meet the attack by standing up in rear of the trenches proved most useful; for the Tekkes, rushing up to them under a heavy fire, had to mount on the parapet, and then descend into the trench or leap over it, which they did not find easy everywhere. And this mode of fighting is eminently adapted to meeting such an enemy as the Tekkes, who only use swords.

During the sortie the enemy's horsemen appeared in bands of about 50 men in rear of the camp and opposite the Opornoye and Olga Kalas. To strengthen the garrison of the latter (65 bayonets of the 3rd Company Sámur Regiment), Navrotski sent the 14th Company Apsheron Regiment.

Soon after the sortie was beaten off, news was received from the observatory in the Volunteers' Kala that the enemy were gathering large masses to attack our right flank; and this was at once communicated by Colonel Navrotski to the Camp Commandant. This attack, however, did not take place, and the rest of the night was passed in the usual firing, the enemy also coming out singly and trying to carry off the killed. After the sortie many weapons, mostly swords, lances, and knives, were collected in front of the trenches.

When all was quiet, the Commanders of the Central and Right Attacks received orders that "the works ordered to be undertaken in the night were to be completed at any cost," and these works were actually completed, *viz.*, the Shirván Redoubt was united with the dam by a trench 68 yards long, and on the left flank the part of the ravine along the stream was put into a state of defence to flank the west face of the Stavropol place-of-arms. To make the above trench, the sappers broke out from the dam and from the bottom of the side trench of the redoubt, in the wall of which openings had

been made, by traversed saps. The left sap was much delayed at first, by having to cross the dam from which the roots of trees had to be cut out,* and in consequence, shortly before dawn, the heads of the saps had to be joined by flying saps. During this the Tekkes fired from time to time on the working parties, but by morning the trench was occupied by riflemen.

In the Right Flank Kala the night passed quietly, although the enemy's patrols had shown themselves in rear of it, but at a respectful distance. Between 5 and 6 A.M. on the 5th (17th) January the roaring of camels and the barking of dogs moving off into the desert was heard from the fortress.

Our losses on the 4th (16th) were 1 officer (Ensign Khodkevitch of the Stavropol Regiment) and 10 men killed, 3 officers (Staff-Captain Rostovtseff of the Artillery, Lieutenant Runovski—died of his wound,—and Ensign Lopatinski of the Stavropol Regiment) and 54 men wounded, and 11 men contused. Four horses were killed and 10 wounded. 65,158 rounds of infantry, 480 of cavalry, and 625 of artillery ammunition and 42 rockets were expended. One rocket-trough and a rocket were captured from us.†

The losses of the enemy were so great, that there were few *kibitkas* in which the women had not to lament some of their relations dead or wounded. In this night the garrison lost more men than during the whole of the rest of the siege put together. In the first two sorties very few had been killed by our artillery fire, but in that of the 4th (16th) large numbers were killed during the retreat, as they were crowding to the entrances. In this night also, during early prayers, was killed Khwāja-Karim-Berdi-Khán, an old man who had been considered a saint and had built a school at his own expense in Bágir. Most of the Marvlis, who had lost 200 men in the sortie,‡ went home next day, and only Kájar-Topás-Khán, with a few horsemen, remained in Dangil-Tapa till the end of the siege.

The failure of the sortie of the 4th (16th) produced great depression among the defenders. Many of them did not believe in victory at all, and many others put no faith in sorties, but only in a hand-to-hand fight inside the fortress. Their confidence in our being defeated if we attempted to storm the place was unbounded, and, therefore, they earnestly desired that we would advance for this purpose. Their cavalry had disappeared, for the greater part of it had gone out to meet our convoys from Sámurskoye and had not returned. The large camp pitched by the enemy along the west face began gradually to disappear; and every day laden camels, escorted by horsemen, were seen moving out into the desert, and only a much smaller number of unladen camels returned to the fortress. In short, the energy of the defence was evidently abating, and the fire from the walls became weaker. This cannot have been caused by a want of cartridges, as the enemy several times fired volleys upon the camp.

On the 5th (17th) January a more lively movement inside the fortress than on the previous day was noticed from the observatory on the Volunteers' Kala, and in two hours 300 men were seen leaving the fortress, but only 190 arriving in it. In the same space of time 93 laden camels and 40 men on foot went out. The enemy's fire was much weaker than on the previous day. Similar reports were received from the Right Flank Kala.§

* The dams at the Grand Duke's Kala and most of the others also were planted with trees.—*Author.*

† Report from Colonel Verjbitski, No. 55, dated 5th (17th) January 1880.—*Author.*

‡ The losses in this sortie were the only ones suffered by the Marvlis.—*Author.*

§ Report No. 10 from Major Bogayevski, and heliogram No. 1 from Lieutenant Starok.—*Author.*

A Persian, named Mujaffar, who had been kept a prisoner in chains in the fortress, but had made his escape, gave us the following information. There were 10,000 men in Dangil-Tapa capable of bearing arms, half of them having muskets, the remainder only swords and lances. Taghma-Sirdár was in supreme command of the defence. Since the beginning of the siege only solitary individuals had left the fortress, and the greater part of their losses had been from artillery fire, the number of wounded being very great. He could give us no idea of the extent of their losses, as the fortress was so extensive, and he, as a prisoner, had not been allowed to leave his master's *kibitka*. The construction of pits to contain the *kibitkas* had considerably diminished the losses from our fire, but had not completely prevented them. Movement inside the fortress by day was forbidden, and only those who absolutely required to be out moved about among the *kibitkas*. The garrison had grain for $1\frac{1}{2}$ months, but there was a want of meat, and cooked food was very seldom to be had. The general feeling of the garrison was one of depression, and the kháns tried to raise the spirits of their men by saying that *Allah* would not allow the Russians to capture the fortress, and that they would soon have to retire on account of insufficiency of supplies. The number of our troops was unknown to them, but they thought it very much greater than that of the force which had attempted to storm the fortress in 1879. The people passed the greater part of the day sitting in their pits, and at night did not dare to sleep, as they expected the storming to begin.

At noon a convoy arrived in camp with supplies from Sámurskoye under escort of the 9th Company Crimean Regiment, 3 *sotnias* of the mixed Cosack Regiment, the Horse Mountain Division, and two 4-pounder guns. The strength of the siege force was thus increased by a company and two guns.

About 6-30 P.M. a report was sent in from the tower of the Volunteers' Kala, to the effect that the enemy were descending into the ditch and preparing for a sortie, and in consequence the troops occupying the trenches were warned to keep a sharp look-out, especially between sunset and the rising of the moon.* On the approach of darkness the men were in such a wakeful state on account of the expected sortie, that, on hearing cries from the enemy's side, a tolerably heavy fire was opened from our trenches, and in some companies it was very wild. The Tekkes, however, did not make a sortie, but contented themselves with yelling from the wall and the ditch, and increasing their musketry fire. The cries of the leaders were heard inciting their men against the Russians, and one voice was heard in the fortress saying—"It is impossible to attack in front, as the Giaurs are in such great strength; other points must be tried." After some time another voice was heard, this time from the dam, saying—"Remain in your places till we advance; send some men to conceal themselves in front!" After this, men were heard refusing to go forward, and then the same voice was heard crying—"Do you fear the Russian bullets? See how long I have been standing under fire, and none have touched me."† This, however, did not convince the defenders, and there were no volunteers for the advanced posts.

At this time the war rockets fired from the tower of the Volunteers' Kala into the fortress were of great use to us, and the Shpakovski lamps on the left flank of the works lighted up the ground in front of our position and prevented the Tekkes from crawling up to our trenches.

* From this day it was made a rule to post the troops for the night before dark, so that officers and men might have a look at the ground and acquaint themselves with the position of the nearest troops.—*Author*.

† Report from Major Bogayevski, No. 12, dated 5th (17th) January 1881, 8-30 P.M.—*Author*.

In view of the proposal to sink a mining shaft and drive galleries beneath the wall of the fortress, it was necessary to measure exactly the distance to the ditch and the dimensions of the latter. For this duty Lieutenant Kunakovski of the Ural Cossacks volunteered; and descending from the Shirván redoubt, he advanced to the ditch under a heavy fire, went down into it, and then returned to the redoubt. He was a second time sent back with a tape measure to measure the exact distance to the ditch.

In case of its having been necessary to rescue Kunakovski, Colonel Kuropátkin had a party of 25 men ready to advance, and, besides this, picked shots in the Shirván Redoubt and the trench observed narrowly the fire from the wall, and several bullets were fired at every flash. On his first journey Lieutenant Kunakovski was accompanied by Non-Commissioned Officer Naum Constantinoff of the 13th Turkistán Battalion as a volunteer, and the second time by Cossack Safron Tetikoff of the Ural Cossacks. The distance to the ditch from the oval trench was 203 feet 9½ inches, the depth of the ditch was 4 feet 8 inches, and its breadth 16 feet 4 inches. The ditch was dry.

This latter piece of news was very agreeable to the Commander of the Expedition, as from the very beginning of the siege he had feared that the enemy would divert the Grand Duke's stream into the ditch. Having made choice of the eastern front to form a breach in, it was of vital importance not to permit the enemy to take advantage of the darkness to lead the water along the wall and thus form a wet ditch. The deflection of the water, General Skobelev thought, might take place at the dam or anywhere above the horse-shoe. From the time of our occupying the dam, the danger of water being led from it into the ditch passed away, but there still remained a very dangerous part near the horse-shoe; and at one time General Skobelev even proposed to place volunteers from Battery No. 2 during the night on the right bank of the Grand Duke's stream up to the dam at the Grand Duke's position, where they were to join hands with Kuropátkin's detached posts.* This proposal was not, however, carried out, and the enemy did not lead water into the ditch, for fear of its undermining the wall of the fortress.

On the evening of this day Lieutenant Airapetoff, Commander of the 12th Company Sámur Regiment, which occupied Opornoye, advanced from it with 40 men to reconnoitre the ground in front, and reached a point 800 paces from the fortress, where he was discovered by the enemy and forced to retire. He, however, succeeded in making a sketch of the ground.

During the night of the 5th and 6th (17th and 18th) January the following works were constructed:—

- (1) In place of Battery No. 3, a redoubt, named the Central Redoubt, was thrown up, and occupied by the 3rd Company Trans-Caspian Local P'attalion and four mountain guns. Its object was to cover the central communication and the camp of the Commander of the Expedition, which had been moved here from the first parallel.
- (2) From the oval trench two parallel traversed saps were pushed forward at a distance of 49 feet apart.†
- (3) Two reserve trenches were made in rear of the dam at the Volunteers' Kala.
- (4) On the left flank the Stavropol Redoubt was strengthened.

* Memorandum by General Skobelev, dated 1st (13th) January 1881, 8-15 P.M.—*Author*.

† Two very heavy mantlets had been made in the Grand Duke's Kala the day before. It was not easy to drag them forward, and, besides, there were no hooks in the Sapper Company. This circumstance, and the difficulties of constructing a deep sap, caused the traversed sap to be adopted.—*Author*.

Information was frequently received in the Volunteers' Kala during the night that the enemy was massing in the ditch for an attack on our left flank, and the troops on this flank stood for some time to their arms, but no sortie took place; only single men came out to pick up the dead bodies, and a dropping fire was kept up on them.

On the morning of the 6th (18th) three columns were sent out from camp—one, under Lieutenant-Colonel Shkurkin, consisting of a company, two heavy guns, a squadron of Dragoons, and a *solnia* of Cossacks, to Sámurskoye, with the wheeled transport; another, comprising two companies and a squadron of Dragoons, under Major Khalich, to forage on the Askhabád road; and a third, consisting of two companies, a *solnia*, the rocket section, and two heavy guns, under Lieutenant-Colonel Popoff, to cut reeds and brushwood in the Garm-Ab defile.*

Besides the arrangements made for collecting siege materials in the environs of Gok-Tapa, orders were issued for all the bags not in use in the supply-depôt to be handed over to the Engineer Park, as also mats and spirit casks, and all the empty boxes in which shells had been brought up, and empty powder or small-arm ammunition boxes from the Artillery Park.

By 1 p.m. on the 6th (18th) the traversed saps had advanced 56 feet, and had been united by a transverse trench, from which they had been again pushed forward. This work was conducted so close to the wall of the fortress, that the Tekkes began to throw lumps of mud into the head of the sap. As no hand-grenades were available, the sappers answered with dynamite cartridges,† which made a tremendous noise on bursting, forced the enemy to evacuate the ditch opposite our works.

According to a report from the Right Flank Kala, the movement of the enemy towards Askhabád had ceased. In the desert very few of them were to be seen, and our *jigits* were foraging in it without hindrance.‡

From 3-30 p.m. single Tekkes were seen descending into the outer ditch by a way cut in the night opposite our position on the dam. The enemy were also passing over to the Jumi-Sufi, into the ditch opposite our left flank, and on to the hillocks opposite the hill of Dangil-Tapa. From all these movements it was concluded that a sortie would be made against our flanks, and somewhat earlier than that on the previous days.§ The conviction of this was so strong, that when a fierce whirlwind, which raised clouds of dust, began at 6 p.m., and the air became so thick that nothing could be seen at the shortest distance, the troops in the trenches and in camp, in expectation of a sortie, continued standing to their arms, while the ground on the left of the third parallel and in front of the Grand Duke's position was lighted up by the Shpakovski lamp and by rockets fired from the tower of the Volunteers' Kala.

When the whirlwind began, the sapping works were stopped, and only recommenced at 10 p.m. In the centre of the transverse trench a descent was made 7 feet broad, and from the bottom of it a gallery was begun and pushed on a certain point of the wall, which had been previously agreed upon. The soil was very favourable for work, and the gallery walls and roof shewed no signs of giving way.

* On the 7th (19th) a second column under Major Materno, consisting of 2 companies, 2 *solnias*, and the Horse Mountain Division, was sent to the Garm-Ab defile to cut reeds for fascines. —*Author*.

† Usually four cartridges tied together and weighing $\frac{1}{2}$ lb. each were thrown. —*Author*.

‡ Report from Lieutenant Sheman, No. 85. —*Author*.

§ Report from Major Bogayevski, No. 21. —*Author*.

During the night the Tekkes, who had descended into the ditch, made no sortie, in spite of the pressing of their leaders. Nevertheless, an attack might have been made at any time of the night, and the Commander of the Expedition specially feared for his left flank. Every hour of delay in the siege increased the chances against us and might produce more than useless losses. "Continue the work with more than extraordinary energy," wrote General Skobelev to Rutkovski and Kuropátkin at 8 P.M. on the 6th (18th); "throw every available man into it, and do not put off for a day the final storming of Gök-Tapa. As the centre and right are strong enough to resist an attack, we need not trouble ourselves as to the left flank and the rear of the camp. As your oath requires, I ask you to continue the work with energy."

The mining and sapping works were continued, and the powder required to produce a breach was brought up from camp to the Grand Duke's Kala. In front of the Volunteers' Kala, a battery for ten mortars was constructed and armed in that night, and No. 5 (Mortar) Battery was abandoned. The object of this mortar battery was to prepare for the storming of the fortress; to bring the whole of its interior under indirect fire; in the event of the attack being repulsed, to prevent the enemy from establishing himself on the breach; and, finally, to keep up the *morale* of our troops.* The results of the fire from this battery were soon evident, for the enemy struck about 500 *kibitkas* that were in the centre of the fortress, and pitched them so as to extend along the wall, thus forming a large open space in the centre. The observers in the Volunteers' Kala also reported the great alarm produced by three mortar shells which fell near the east wall at 2 A.M. on the 7th (19th).† On the left attack Kozelkoff constructed a breaching battery at the extremity of the second parallel for four 4-pounder guns.

After the night's affair of the 4th (16th) January, the huge number of corpses lying in front of and among our trenches began to decompose in consequence of the heat, and our troops could not only not manage to bury them, but could not even drag them away from where they lay. On the 6th (18th) the Commander of the Expedition expressed his opinion that "it might be possible to propose to the enemy a short cessation of hostilities to gather up the bodies, during which time we should not fire." Without any hope of this being agreed to, Lieutenant-Colonel Yumudski, who had been stationed in the Volunteers' Kala to listen to what the enemy said, was ordered to call out to the Tekkes to cease firing. Lieutenant-Colonel Yumudski did this at 1 P.M., and the enemy at once ceased-firing, upon which "cease-firing" was sounded upon our side, and the walls were soon covered with Tekkes. General Skobelev was at that time in the third parallel on the left flank, and sent officers with interpreters to the horse-shoe to negotiate. On the part of the Tekkes, Hájí-Murád, an inhabitant of Yangi-Kala, descended from the wall carrying a drawn sword, with pale countenance and dejected expression. He went to the extremity of the third parallel, on the parapet of which General Skobelev had mounted, and said that there were now no influential men in the fortress, as all had gone off into the desert, and that the rest would undertake nothing without them. He then went back to the wall, and our officers advanced to the horse-shoe; but the enemy began to cry to them from the wall to go back and not to look at their works, whereupon the officers returned to the third parallel. Then, by General Skobelev's order, the interpreter Tervartánoff cried out to the Tekkes to come and gather up the bodies of the defenders of the fortress; but this they refused to do,

* General Skobelev's memorandum to Colonel Kuropátkin, dated 4th (16th) January 1881, 9-30 A.M.—*Author*.

† Report from Major Bogayevski, No. 34.—*Author*.

as they suspected that we had some infamous stratagem in view, and that, if a number of the people came out to gather the bodies, the Russians would kill them all. On a proposal being made that, if the fortress were surrendered unconditionally, the people would be saved and their leaders pardoned, they cried from the wall that the Khán of Khiva would have first to be consulted. On being reminded that at the taking of the fortress their wives and children might perish, and that, if they desired to prolong their resistance, it would be better for them to send the latter out into the desert, they answered—"That is not your business. Our families are well protected." As we afterwards learnt, the leaders feared that, if the women were sent away, the men would follow them.

In the meantime a council had been held in the fortress in the *kibitka* of Mahtum-Kuli-Khán, and many were inclined to declare their submission; but Taghma-Sirdár said—"It is now too late to talk of this." A crowd of young men who assembled at Mahtum-Kuli-Khán's *kibitka*, on hearing the advice to submit being given, rushed into the council with drawn swords and swore that they would not hear of peace. Under pressure from the young men, the council gave orders to cry out from the wall, that the Tekkes would have no dealings with the Russians, and that they, therefore, invited them to take cover in their trenches, as they were going to reopen fire.

The Commander of the Expedition at once ordered all to take cover, and the Tekkes on their side left the wall. The enemy was then requested to recommence firing. At 2 P.M. a shot was fired, and soon the fusillade went on as before. The cessation of firing had lasted about an hour and the enemy had behaved very honourably. When we remarked that he was taking advantage of it to carry on work in front of the "ice-cutter," he was told to put a stop to it, and the work at once ceased. On our side we carried out no works, and only succeeded in dragging the dead bodies out of the trenches and placing them in large heaps between the third parallel on the left attack and the wall of the fortress. During the armistice, we noticed that the horse-shoe was not occupied.

On that day, to save artillery ammunition, it was resolved to fire only in the following cases:—

- (1) in the event of a sortie;
- (2) with a distinct object in view; and
- (3) to make a breach.

By night, rockets were ordered to be fired.

On the 7th (19th) January the Commanding Engineer reported to the Commander of the Expedition that the mines would be completed by noon on the 9th (21st), and after that a breach could be made at any time ordered. In consequence of this, General Skobelev ordered the artillery to begin to breach the south front near the south-east angle at 8 A.M. on the 8th (20th), and all preparations to be made to storm the place at 7 A.M. on the 10th (22nd) January. Arrangements for the storming were also drawn up.

The enemy was dispirited; therefore, any change in the original disposition of his masses would lead to disorder and loss of control over them, and would be to our advantage; and so in the approaching attack every possible means ought to be taken to produce disorder and confusion under fire. General Skobelev, therefore, proposed to move a column from the Right Flank Kala before dawn on the day of the storming to occupy "Petrúsevitch's Garden."* Having occupied it, this column was to open a heavy fire on the

* General Skobelev at first thought of wearying out the enemy by a constant succession of demonstrations by night, and for three nights before the actual storming to cause alarms by sending out small detachments with a large number of drummers. The interior of the fortress was at the same time to be bombarded by the artillery.—*Author.*

interior of the fortress, and thus, with the aid of a cannonade from the Right Flank Kala, draw upon itself the attention of the enemy. It was to make as much noise as possible, but at the same time it was to act very carefully; and only in the event of the general attack succeeding was it to approach the main wall and turn its false attack into a real one, for which purpose it was to be furnished with storming-ladders and petards. When dawn had broken, a second column of greater strength, and having with it all the rocket tubes, and, for the time, all the artillery of the force, was to bombard the Mill-Kala and the works defending it with its artillery, and then make an impetuous attack upon it, and seize the dam and all the enemy's works, which could be carried without too great loss; but, till the other columns had established themselves on the rampart, the duties of this column were to be demonstrative and defensive.

When the attack on the Mill-Kala was developed, all our artillery was to begin a heavy bombardment of the fortress. At about 10 A.M. the mine was to be fired, and simultaneously two columns were to seize the main wall,—one by the breach on the east, and the other by that on the south front. The column which had occupied the Mill-Kala was to advance to the attack, try to join hands with the column which had advanced on the breach, and occupy the orillons on the south front. During the advance of the columns, the artillery was to keep up its fire on the interior of the fortress.

Having occupied the rampart, the troops were at once to establish themselves in the salient angle and form it into a reduct,* and were in no case to engage in a hand-to-hand combat inside the fortress. The troops would probably meet with only slight opposition in capturing the rampart of the fortress, but the fight inside it might last for several days. Portable bridges were to be prepared to facilitate the artillery being brought on to the rampart, and the columns were to be provided with storming-ladders and gabions. The supposition that the enemy would hold out inside the fortress was caused by the rumour that inside it was a entrenchment of *kibitkas* filled with earth. Although up to the 8th (20th) the men on the look-out had reported that nothing of this sort had been noticed, on the 9th (21st) the Superintendent of the Observatories had reported that a noise as of earth being thrown up had been heard inside the fortress, and that it was supposed that the enemy was engaged in forming a second line of defence opposite the eastern front.†

According to the information from the observatories up to the 8th (20th) January, the number of men in the fortress capable of bearing arms was above 10 or even 12,000. These figures were, of course, only approximate,‡ and were based on a calculation of the number of *kibitkas*,§ on observation of the movement inside the fortress, and on a computation of the number of men on the walls during the armistice on the 7th (19th). The enemy had three guns; but as he had very little ammunition for them, and nobody was acquainted with their use, he could get little advantage out of them. Only one-sixth of the garrison had muskets, and the remainder were armed exclusively with swords and lances, a large number having only short pikes (knives tied on to sticks). Judging by the very careful expenditure of cartridges, and by the fact that during the day men were seen picking up our bullets, the garrison was feeling a want of powder and lead.

* General Skobelev considered that for each column to form a reduct when working under heavy fire would be required, allowing for a front face of 70 yards, 100 gabions, 40 fascines, and 200 small and 100 large sandbags. Besides these, the local reserves should have empty boxes and spare bags.—*Author*.

† Report from Major Bogayevski, No. 43.—*Author*.

‡ Other accounts placed it as high as 20,000.—*Author*.

§ One-third of all the *kibitkas* were supposed to be empty.—*Author*.

During the day the fortress was only guarded by single sentries on the wall and behind the traverses, and three small guards were near the unfenced ponds. At sunset part of the garrison was sent into the ditch, to guard the fortress from a night attack, fire on us, or make sorties. Single men were observed on the walls at night, who occasionally fired on our working parties or into the trenches. Riflemen, armed with Berdan rifles, were placed in the south-east angle of the fortress, and during the whole day these kept up a more or less continuous fire on the camp. Before sunset they usually fired a few volleys.

It was evident that the enemy expected a night attack on the southern and eastern faces of the fortress. The northern face was only guarded during the night by 80 or 100 men sent out to the entrenchment near a ruined wall.

Putting all the information together which was sent in from our observatories or gained by our listening posts, we came to the conclusion that the *morale* of the enemy was much shaken. After the defeat of the sortie of the 4th (16th) January, part of the garrison collected in the ditch had refused to advance, notwithstanding the orders of their leaders; and after the bursting of a well-placed shell groans were several times heard, and cries of "We shall all be killed!" The garrison expected the storming every hour, and did not put out their fires at night.

Observations made of the number of men, horses, and camels arriving at and leaving the fortress shewed that the departures predominated, but not to any great extent, and for the last two days there had been hardly any communication with the desert.*

To enable us to push forward a strong guard to protect the descent to the mines, a redoubt for 30 riflemen, called the Sappers' Redoubt, was constructed on the night of the 7th and 8th (19th and 20th) January. Two traversed saps were begun from it next morning, and in its interior two ventilating shafts were made for the mine. On the left flank the breaching battery was enlarged to hold four more 4-pounders; and opposite the third parallel, over the Grand Duke's stream, a bridge ten paces wide was built for the storming columns to cross on their way to the breach.

At 8 A.M. on the 8th (20th) January the breaching-battery opened fire from eight 4-pounder guns. Its fire was very efficacious, and after two hours' firing a breach 23 yards broad was made in the wall, and the tops of the *kibitkas* inside were exposed. The enemy were not long in repairing the breach with earth taken from the inner trench, but suffered great loss in so doing. To make the breach more practicable, volunteers were called for to go forward with the pyr-oxyline mines; and a detachment of volunteers, under Midshipman Mayer and Ensign Boguslavski, advanced from the third parallel at 10 P.M. On reaching half-way to the breach, they heard the voices of a large number of Tekkes in the ditch; and as the volunteers had received orders not to engage with the enemy, they returned to the third parallel.

The mining went on with great success, as the Commander of the Expedition had promised a reward of 3,000 *roubles* to the 30 miners if they completed the work by the 10th (22nd). The rumour that the Russians were digging underground to blow down the walls had already reached the fortress. Taghma-Sirdar and the other kháns thought such a rumour well grounded, but they could not see how much such an explosion would endanger them, and, therefore, paid little attention to the rumour. It was explained to the people that the Russians were digging with a view to penetrating into the interior

* Report from Major Bogayevski, dated 8th (20th) January 1881.—*Author.*

of the fortress, but that that was nothing, and that all would be sabred in turn as they came out.

On Kozelkoff's left attack the breaching battery was enlarged so as to hold four more 9-pounders; and behind the third parallel four reserve trenches for the storming columns were excavated. General Skobelev was very much interested in the timely construction of a place-of-arms for Kozelkoff's column and of proper sally-ports for it, and reminded him that a change of front under fire, when advancing to the attack, was not only difficult, but dangerous, and adduced, as an example of failure, the attack of the French on Sevastopol on the 6th (18th) July 1855, principally because no sally-ports were provided for the columns and the proper moment was let pass, as success or failure is decided instantaneously. He proposed to make cuttings in the parapet the night before the attack, and fill them up with gabions or sandbags, which, at the proper moment, could be torn aside to let the troops pass.* Both through the first and the other parallels broad openings were made on the way to the Grand Duke's position and to the artillery breach.

During the night of the 8th and 9th (20th and 21st) January, Captain Hetschel made a second measurement of the ditch and its distance from the descent to the mines. Great care was required in these operations, as the Commanding Engineer proposed to use all the powder then in the Engineer Park, according to the orders of the Commander of the Expedition. General Skobelev had, therefore, requested Rutkovski to report that no error had been made in the determination of the distance, and that the mine would actually explode under the main rampart. "The Commander of the Troops," wrote the Chief of the Staff to Rutkovski officially, "places on you all the responsibility of the mine being exploded at the proper time and in the proper place. You are to report whether you have taken all measures necessary to ensure no accidents happening, and especially to prevent errors in the determination of the distance to the wall of the fortress. All might be lost by such an incorrect calculation. You must remember this, and take most extraordinary measures of precaution to again verify the distance to the rampart, if you have any doubts as to the accuracy of those first made."†

To this Rutkovski replied that by the sending of Hetschel he had taken all measures to avoid error, and that he was fully convinced of success, unless he met with oppositions from the enemy sufficient to delay the finishing of the works.‡

It has been stated that the Commander of the Expedition had resolved to storm the fortress at 7 A.M. on the 10th (22nd) January, and that before the storming began the mines under the rampart were to be exploded. At 7-30 A.M. on the 9th (21st) January, Colonel Kuropátkin reported to the Commander of the Expedition that the mines would not be charged before 7 A.M. on the 10th (22nd) as Rutkovski proposed, since delay had taken place in the works in consequence of the feeble action of the air-shafts.§ General Skobelev at once went to the mining gallery, and gave Rutkovski written orders to report to him on the state of affairs, and as to the measures necessary to ensure the fortress being stormed on the 10th (22nd). Colonel Rutkovski was given 1½ hours to draw up a memorandum.

* Diary of the 1st Section of the Staff of the Trans-Caspian Field Force, No. 8, Part II, page 68.—*Author.*

† Colonel Grolekoff to Colonel Rutkovski, No. 170, dated 8th (20th) January 1881, 11 A.M.—*Author.*

‡ Report from Colonel Rutkovski, dated 8th (20th) January 1881.—*Author.*

§ Report from Colonel Kuropátkin, No. 49.—*Author.*

By 10 A.M. the Commanding Engineer pointed out that, according to the measurement made on the night of the previous day, the distance to the wall from the head of the mining gallery was 119 feet, but, according to the measurement made at 10-20 on the 9th (21st) January by Captain Hetschel with two non-commissioned officers, by stretching a rope from the edge of the ditch to the trench, and twice over to avoid error, the distance was found to be not 119, but 105 feet, of which the gallery had already covered 70. In consequence there only remained 35 feet to the ditch, and 49 to the wall, or, allowing the branch to run 7 feet under the wall, 56 feet. Calculating the branch at $17\frac{1}{2}$ feet, there, therefore, remained $73\frac{1}{2}$ feet to mine. This measurement finally convinced Rutkovski that the mine could not be completed by the morning of the 10th (22nd) January; and therefore, to prevent the storming being postponed till after that date, there only remained one means—and that was to breach the wall by artillery. As to crown the counterscarp by flying sap, unite it by communications with our nearest approaches, construct epaulements in the ditch and blindages for the miners, was too much work for one night, and Rutkovski did not think it possible to carry out these works by day. To construct a chamber under the wall would require not less than four hours, and the work might be interrupted, the expected effect might not be produced, and we might meet with unforeseen resistance on the rampart, not to speak of the attempts the enemy might make to descend into the ditch and destroy our works. On his part Rutkovski thought it inadvisable to risk this, and considered it better to give up the idea of a breach by mining and to rely on the artillery only. A breach made by artillery could be improved by spade-work, and a reconnaissance of it might be made under cover of artillery fire. If, however, the storming was put off till the 12th (24th), the works could most certainly be finished,* as the mine would advance $1\frac{1}{2}$ to 2 feet per hour, or 42 feet in the 24 hours, so that it could be completed by noon on the 11th (23rd), and about 12 hours would be required for the formation, loading, and tamping of the chambers.

The Commander of the Expedition, therefore, resolved to put off the storming till the 12th (24th), and to push on the mine and traversed sap—the latter so that, in case of the failure of the mine, the head of our works might be on the edge of the ditch by the 12th (24th). If the mine then failed, the other measures referred to in Rutkovski's memorandum might be tried.

Notwithstanding the shrapnel and small-arm fire poured on the trench all night, the Tekkes repaired it, and by dawn on the 9th (21st) had raised the wall to its former height, so that the tops of the *kibitkas* were no more visible. The breaching battery again opened fire upon it; but this was soon stopped by the Commander of the Expedition, who desired only to make a breach immediately before the storming.

In addition, the enemy had during the night strengthened the eastern face of the redoubt at the Mill-Kala to flank the ditch opposite the breach, and the Tekkes had begun to gather in large numbers in it.

In the evening the 10th Company of the Crimean, two companies of the Daghistán, and two of the Sámur Regiment arrived in camp, with the 45th Divisional Ammunition Column and Golovkoff's column, who came in from Kalát with 124 gabions and 386 fascines.†

The lookers-out in the Volunteers' Kala sent in reports of the effect of our artillery fire and of a movement of the enemy out of the fortress. They had

* Colonel Rutkovski's Memorandum, dated 9th (21st) January 1881.—*Author*.

† Report from Lieutenant Krjivetski, No. 1, dated 9th (21st) January 1881.—*Author*.

also received frequent intelligence of a gathering of the enemy to attack the left flank of the siege works. To encourage the garrison, men had been calling out to their comrades in the fortress to be steady, as a reinforcement of 10,000 men was expected from Marv. Close to the eastern front were heard cries and fighting, because part of the garrison would not assemble for a sortie. On the order, "No sleeping, but go out to fight the Russians," replies were heard,—“Don't sleep yourself, but go out and fight. The Russians will..... you!” In the trench and the traverse near the Mill-Kala the voice of a chief was heard ordering a sortie, but the men in the trenches refused to budge; and then the same voice ordered them not to let the Russians creep into the fortress.*

In the night the mortars were fired occasionally, and the fire from the battery in the Grand Duke's position was directed by reports from the observatory.

On the 10th (22nd) the following reports were received from the observatory and from the advanced posts as to the state of affairs with the enemy. Inside the fortress only single men had been observed moving about during the daytime, and the fire from the wall was only directed on the camp, and did not annoy the troops in the advanced trenches. Eleven rounds were fired from the guns. The movement into and from the desert was almost the same as on the previous days. At 10 o'clock some 300 men had trotted out from the north front, and till evening they had been seen in the desert. At 7 P.M. 100 horsemen returned, and the following figures show the total numbers who arrived in or left the fortress between 9 A.M. and 4 P.M. :—

Arrived	...	...	224 men,	11 camels.
Left	...	...	276 „	197 „

As twilight set in, the enemy occupied in force the south and eastern walls in expectation of an attack, and also the advanced works and the trenches at the Mill-Kala.

At 8-30 P.M. the following report was received from Colonel Kuropátkin: "Suspicious quietness reigns in the fortress. The listening posts have heard sounds of men collecting in considerable force behind the wall opposite our works. The post of Turkumáns† think that a sortie is to be expected on the moon rising, or at dawn. To make sure, I have placed a detached post of four men (three Ural Cossacks and a man of the Rifle Company 13th Battalion) on the edge of the ditch. We are on the look-out and should be glad of an attack."‡

The enemy had actually no power left to make a sortie. Directly the breach was made, the Tekkes had been expecting the storming every hour, not only at night, but by day. Their attention was exclusively devoted to the defence of their wall, and they stopped sending men into the ditch, and strengthened the numbers on the walls.§ This permitted of our sending volunteers into the ditch on the evening before the storming and making breaches in the wall by pyr-oxyline mines.

During the night the leaders several times encouraged their men to be steady in the event of an attack by the Russians, saying—"Allah will help us to annihilate them, and we shall show them that we are not such as the Kirghiz Yamúts, and other Mussalmáns whom they have subdued." Some time

* Reports from Major Bogayevski, Nos. 51 and 52.—*Author*.

† Yamút Turkumáns belonging to the Turkistán Detachment, who had been placed to listen to what was said in the fortress.—*Author*.

‡ Report from Colonel Kuropátkin, No. 53.—*Author*.

§ Report No. 57 from Major Bogayevski.—*Author*.

afterwards orders were given that nobody was to dare to leave the fortress under pain of a dreadful punishment, and directions that, "for every ten men posted on the wall, a reinforcement of 700 was to be ready." The guards on the wall were forbidden to sleep; but during the night—from 10 P.M. on the 10th (22nd) to 7 A.M. on the 11th (23rd)—there was no firing from the fortress.

The excellent organization of the observatories, which gave an account of every step taken by the enemy at any given moment, and reported all that was heard said by the Tekkes, furnished the Commander of the Expedition with abundant materials for forming an opinion as to the state of the *morale* of the defenders; and he was convinced that the energy of the defence was broken, and that the storming would be successful.

At midnight on the 10th and 11th (22nd and 23rd) January, the mining gallery crossed the ditch at 14 feet below the surface, and the men were working with rapidity, but carefully and with revolvers ready. Both saps were joined by an epaulement 35 feet from the ditch; and this, with the aid of gabions, was given a strong profile, and occupied by a section of the 10th Company Shirván Regiment. From this epaulement an air shaft marked with gabions was sunk into the gallery, and a blinded sap was made into the ditch. The whole work was carried out under protection of a detached post pushed forward to the ditch, and was not interrupted by the enemy.* By the morning of the 11th (23rd) the Commanding Engineer reported that in the night three branches had been made, and that they were about to be charged with 23·04 cwt of powder.

On receiving this report, arrangements were at once made for the storming on the 12th (24th) January, and orders were drawn up. On the 11th (23rd), on the left flank near the Stavropol Redoubt, two foot-bridges were thrown over the stream below that constructed for artillery, and there also, in rear of the first parallel, ten gun-pits were made, as the number of embrasures in the large battery to the right of the Stavropol Redoubt was insufficient. On reconnoitring the enemy's position on this day, it was remarked that the northern and eastern walls of the Mill-Kala had been destroyed,† and that the counter-approaches in front of the "ice-cutter" were strongly occupied.

At midday the troops detailed for the garrisons of the Opornoye, Olga, and Right Flank Kalas, and for that of Redoubts Nos. 1 and 2 and Battery No. 5 during the storming, relieved the troops at those points which had been detailed for the storming columns and reserves. Lodgments were constructed to cover the reserves; and General Skobelev ordered that they were to be placed "so as not to suffer from fire, and near enough to the point where the crisis was to be expected, to take part in it with their heart and eyes, but not to endanger their skins. The reserve will then be placed properly, and that is the ideal disposition."‡

During this day the enemy only kept up a feeble fire on the camp and advanced trenches, and fired a few cannon balls at the former.

When darkness came on, four 9-pounder guns were brought forward from the battery near the Stavropol Redoubt to the breaching battery in the second parallel. It was proposed during the night to enlarge the breach made by the artillery by pyr-oxylene mines; and for this duty Lieutenant Ostolopoff of the 1st Reserve Railway Battalion and Midshipman Mayer volunteered. To

* Report No. 46 from Colonel Kuropátkin.—*Author*.

† A reconnaissance of the Mill-Kala was made by General Skobelev, along with Lieutenant-Colonel Haidaroff, who had been named to command the column detailed to storm this kala at 2 P.M. on the 8th (20th) January, with an escort of a squadron of Dragoons and a *sootnia* of Cossacks.—*Author*.

‡ This definition of the proper place for a reserve, as General Skobelev said, was borrowed from Count Todleben.—*Author*.

support them was detailed the 13th Company Apsheron Regiment, which at about midnight occupied the horse-shoe, and pushed forward volunteers to the edge of the ditch to cover the work of the miners. About 1 A.M. the mines were fired in the breach, after which the volunteers and 13th Company retired. Riflemen in the third parallel kept up a fire all night on the breach, and the batteries fired shrapnel and common shell. During the night also the charged mines were tamped.

Our losses between the 5th (17th) to the 11th (23rd) January had been 13 men killed, 3 officers (Sub-Lieutenant Kherkheulidze of the Artillery, Lieutenant Zrodlovski, and Lieutenant Sheman of the Navy, Commandant of the Right Flank Kala) and 59 men wounded, 7 men contused, and 42 horses killed and 31 wounded. 200,757 rounds of small-arm and 1,772 of artillery ammunition and 264 war rockets were expended.

The following orders were given for the 12th (24th) January :—*

“To-morrow, the 12th (24th) January, the main rampart of the enemy's fortress will be stormed at its south-east angle.

The following columns are detailed :—

(1) Colonel Kuropátkin—

1st and 2nd Companies 1st Battalion Shirván Regiment.

3rd Battalion Shirván Regiment.

Three companies Turkistán Force.

Half a company of Sappers.

A detachment of volunteers and a working party.

A *solnia* of dismounted Cossacks.

The Turkistán Mountain Division of Artillery.

One division of the 6th (Mountain) Battery 21st Brigade.

Two mitrailleuses.

Two rocket-troughs of the Turkistán Force.

A heliograph.

Total 11½ companies, 1 detachment, 9 guns, 2 rocket-troughs,
1 heliograph.

To mount the breach produced by the mine opposite the Grand Duke's position, entrench itself in it, fortify the south-east angle of the fortress, and join hands with Colonel Kozelkoff's column.

Rendezvous—The Grand Duke's position at 7 A.M.

(2) Colonel Kozelkoff—

3rd Battalion Stavropol Regiment.

4th Battalion Apsheron Regiment.

A section of Sappers.

Detachment of Naval Volunteers and a working party.

A division of the 6th (Mountain) Battery 21st Brigade.

A mitrailleuse.

Two rocket-troughs.

A heliograph.

Total 8½ companies, 2 detachments, 3 guns, 2 rocket-troughs,
1 heliograph.

To capture the breach made by the artillery, join hands with the first column, and fortify itself on the breach in connection with Colonel Kuropátkin's column.

Rendezvous—The third parallel at 7 A.M. in the advanced place-of-arms.

* See Plan of the storming of Dangil-Tapa on the 12th (24th) January 1880.—*Author.*

(3) Lieutenant-Colonel Haidaroff—

1st Battalion Sámur Regiment.

Detachment of Volunteers and a working party.

A section of Sappers.

A division of the 4th Battery 19th Brigade.*

A mitrailleuse.

Five rocket-troughs.

Half of the 1st and the 3rd *Sotnia* of Taman Cossacks.

The Horse Mountain Division.

A heliograph.

Total $4\frac{1}{2}$ companies, 2 detachments, $1\frac{1}{2}$ *solnias*, 5 guns, 5 rocket-troughs, 1 heliograph.

To capture the Mill-Kala and the entrenchments near it to prepare the way for, and ensure the success of, the 2nd column, and then to bring a heavy artillery and rifle fire to bear on the interior of the fortress, taking the positions occupied by the enemy to oppose the main attack in flank and rear, and finally, as the main attack proceeds, to capture the rampart.

Rendezvous—The Opornoye Kala at 3 A.M.

General Reserve under my orders, at the Stavropol Redoubt, to assemble at

7 A.M. :—

9th and 10th Companies Crimean Regiment.

3rd Battalion Apshevon Regiment.

1st and 2nd Companies and 4th Battalion Daghistán Regiment.

3rd and 4th Companies Shirván Regiment.

3 companies 3rd Sámur Battalion.

Railway Company :—

Six guns, each from the 3rd and 4th Batteries 19th Brigade.

4th Battery 20th Brigade.

Half of 1st Battery 21st Brigade.

A three-company battalion made up of dismounted Dragoons and Poltáva Cossacks.

A heliograph.

Total 21 companies, 24 guns, 1 heliograph.

The attack will be begun by Lieutenant-Colonel Haidaroff at 7 A.M., and at the same time all the artillery will open fire on the fortress.

The storming of the breaches will be preceded by a heavy bombardment of the fortress for half-an-hour.

The attacks on both breaches will be made simultaneously and immediately after the explosion of the mine in front of the Grand Duke's position. The explosion will take place on a written order from me to the Commanding Engineer in the Grand Duke's Kala.

The artillery will fire on the interior of the fortress, according to orders given by me to its commander.

The men will carry biscuits, tea, and sugar for two days, mess-tins, water-bottles, 120 rounds of ammunition, and entrenching tools.

Dress—Uniform or great-coat, according as commanding officers think fit.

Bandaging stations :—

(a) In the Grand Duke's Kala.

(b) On the left flank of the third parallel.

(c) In the Stavropol Redoubt.

*The whole of this battery was detailed.—Author.

- (d) With Lieutenant-Colonel Haidaroff's column—first in Opornoye, then in the Mill-Kala.
- (e) In the communication between the first and second parallels; and
- (f) Reserve bandaging stations in the camp and in the Grand Duke's position.

At the beginning of the action I shall be in the Stavropol Redoubt. As garrisons will remain :—

- (1) In the Right Flank Kala, half a *sotnia* of Ural Cossacks, two 4-pounder and two 9-pounder guns.
- (2) In the Olga Kala, half of the Orenburg *sotnia* of the Turkistán Force.
- (3) In Opornoye, half of the 1st *Sotnia* of Taman Cossacks.
- (4) In Redoubt No. 1 and Siege Battery No. 1, half a company of the Trans-Caspian Local Battalion.
- (5) In Redoubt No. 2, a company of the Trans-Caspian Local Battalion and a division of the 3rd Battery 19th Brigade.
- (6) In the Central Redoubt and Siege Battery No. 3, half a company of the Trans-Caspian Local Battalion and a division of the 6th Battery 21st Brigade.
- (7) In Battery No. 5, an Engstrem gun, four 4-pounder guns, and a company of the Trans-Caspian Local Battalion.
- (8) In the Breaching Battery, eight 4-pounder guns and four 9-pounder guns.
- (9) In the Stavropol Redoubt, a company of the 3rd Battalion Sámur Regiment.
- (10) Mortars—six in the Mortar Battery on the left flank, and ten in the Grand Duke's Kala.
- (11) In camp, 2nd *Sotnia* 5th Orenburg Cossacks, combined detachments of all corps, non-combatants, and servants. The Camp Commandant during the storming will be Colonel Artsishevski."

Colonel Navrotski was named commander of the infantry of the reserve at the Stavropol Redoubt. The troops of this latter were ordered to bring their camp kettles with them and cook near the redoubt. Thirty pack horses were detailed to carry ammunition from the reserve to the storming columns.

During the storming the bands were distributed as follows :—Two to Colonel Kuropátkin's and one each to Colonel Kozelkoff's and Lieutenant-Colonel Haidaroff's column and to the main reserve.

The programme for the artillery on the 12th was as follows :—" At dawn, if it is necessary, the artillery is to make a breach to the east of that already made in the south front; for this purpose will be employed eight 4-pounders, four 9-pounders, four heavy and four light (new pattern) guns, and about 1,000 rounds in all will be allowed. Besides making the breach, all the artillery are also to begin firing independently at points fixed for bombardment, the observations as to where the projectiles fall being made from the Volunteers' Kala and at once communicated to the batteries. The siege batteries of the right attack and the mortar battery on the right flank will assist the advance of Lieutenant-Colonel Haidaroff's column. For half-an-hour before the storming begins, the artillery will bombard the south part of the fortress heavily, the siege batteries of the right attack firing on the south and south-west part, and the field batteries on the south and south-east sections. The mortar batteries will distribute their fire over all the southern part, but principally on the points where the *kibitkas* are pitched. The guns of the Right Flank Kala will fire on any bodies of the enemy assembled in the southern part of the fortress, and,

according to circumstances, on the north-east or north-west faces. Directly the mine is exploded, the artillery will fire one or two salvoes against the southern part of the fortress. When the storming begins, the fire of all the artillery will be directed on the northern, and principally on the north-western, part of the fortress. To carry out all these objects, in addition to making the breach, will require not fewer than 2,000 rounds. The troops should be warned that the artillery will fire over the heads of the storming columns. In the event of the explosion of the mine failing, all the artillery will be moved into line with Siege Battery No. 5 to breach the eastern front.”*

On account of the expected storming, Divine Service was held in camp at 2 P.M. on the 11th (23rd) in the presence of detachments of all the troops not on duty. According to the orders, at 6 A.M. on the 12th (24th) January, all the troops of the storming columns and of the reserve were in readiness at their posts, and the troops who had occupied the trenches during the night joined the reserve.

At 7 A.M. Lieutenant-Colonel Haidaroff's column formed up in order of attack and began its advance on the Mill-Kala. The object of this column was to make a diversion, and Haidaroff, by a bold and early advance, was to draw the enemy's masses upon himself and thus lighten the task of the storming columns. The 4th Battery 19th Brigade came into action and fired common shell at the Mill-Kala, and after its front had been breached, the column moved 600 yards forward, and from this position began to prepare for an attack on the kala. After a sufficient preparation, the volunteers in loose order, followed by the 2nd, 3rd, and 4th Companies of the Sámur Regiment, moved forward to the attack. The battery remained in its position and fired on a redoubt where the enemy had concentrated, the 1st Company of the Sámur Regiment acting as its escort, while the $1\frac{1}{2}$ *sotnias* of Cossacks with the Horse Mountain Division formed up in line with the battery and protected its left flank by scouts. At 8-30 the dam and the Mill-Kala were taken, and the latter was at once turned into a defensive position.

After the occupation of the kala, General Skobeleff sent the 1st Company of the Daghistán Regiment forward from the general reserve to the right bank of the Opornoye stream, to flank with its fire the approaches to Haidaroff's position and connect his column with the general reserve.

The enemy kept up a fire on Lieutenant-Colonel Haidaroff's position from the redoubt and from the wall, and some mounted parties moved along the west front and enfiladed it. The 4th Battery 19th Brigade remained in its first position, half of it flanking the approaches to the Mill-Kala from the east and firing on the ditch and the south face of the fortress, the other half engaging the enemy on the west front. The two horse mountain guns and the cavalry scouts also opposed the latter, and the rocket-troughs were brought into action on the dam. In this position Haidaroff's column remained till the general storming began.

The attention of the enemy was thus drawn towards Haidaroff's column, and all their leaders were gathered in the angle opposite the Mill-Kala. Seeing all the movements on our side, the Tekkes supposed that something extraordinary was going to take place, and, therefore, did not relax their watchfulness in other quarters. At the risk of his head, nobody dared to leave the fortress.

At 7 A.M. the breaching battery, armed with four 9-pounder guns and eight 4-pounder guns, opened fire on the breach made on the 8th (20th), to complete it

* Report from Colonel Verjbitski to the Chief of the Expedition, No. 125, dated 11th (23rd) January 1881; Circular to the troops, No. 30, dated 11th (23rd) January.—*Author*.

and make it passable; and, to increase the effect, half of the 1st Battery 21st Brigade, 6 guns of the 3rd Battery 19th Brigade, and the 4th Battery 20th Brigade, in all 18 guns, were brought to bear on the same object. In a short space of time the breach was ready, in spite of the efforts made by the enemy to repair it and the well-aimed fire poured on the batteries, and the artillery then fired shrapnel on it. Notwithstanding the terrible fire, however, the enemy continued obstinately to work on the breach.

At 10-50 A.M. the Commanding Engineer received a memorandum from the Commander of the Expedition, which ran: "Within half-an-hour of the receipt of this order, Your Excellency is to fire the mine pushed forward from the Grand Duke's Kala," *i.e.*, the explosion was fixed for 11-20 A.M. At the same time all the artillery was ordered to increase its fire on the south-eastern angle of the fortress and continue the bombardment with shrapnel and common shell for half-an-hour.

Notwithstanding the hot fire, the enemy occupied the breach and fired most energetically, and working parties were seen throwing up earth in the artillery breach.

About 11 A.M. the Commander of the Expedition, who was in the Stavropol Redoubt, received a report that the mines were ready and would be fired at 11-20, and that 20 minutes before the explosion Kuropátkin's troops would be withdrawn from the advanced trenches, so that they might not be injured by masses of mud, &c., falling on them.

Exactly at 11-20 a column of earth and smoke rose high up from the eastern face. The mine had been fired, and the result was a passable breach 105 feet wide. The impression made by the unexpected explosion on the enemy was so terrible, that the Tekkes, as they told us afterwards, lost all their senses, and nobody would comprehend what had occurred. Many thought that it was an earthquake. The more cowardly ones ran out of the fortress, but a mass of brave men resolved to die and not let their stronghold fall.

After the explosion of the mine, the artillery changed their objects and fired on the north-east angle and the northern part of the fortress. Then the storming began.

According to the orders, Colonel Kuropátkin's column was to seize the breach made by the mine, establish itself upon it, join hands with Colonel Kozelkoff's column, and fortify itself in the south-east angle of the fortress. This column had made the following arrangements for the storming: On the 11th (23rd) January, 100 gabions, 15 fascines, 10 scaling-ladders, 100 large and 300 small sandbags, 250 shovels, 60 pickaxes, 50 axes, 30 crowbars, 20 small-arm ammunition boxes, and 20 water-casks had been brought up into the position near the dam. The storming column had been divided into three parts as follows:—

- (1) Under Major Sivinis:—
9th, 10th, and 11th Companies Shirván Regiment, Voropánoff's Volunteers, half a company of Sappers, and two rocket-troughs of the 1st Orenburg Cossacks.
- (2) Under Staff-Captain Fok:—
1st and Rifle Companies 10th Turkistán Line Battalion, 3 mountain guns, and 2 naval mitrailleuses.
- (3) Reserve under Lieutenant-Colonel Gulyayeff:—
3rd Company 5th Turkistán Line Battalion, 1st, 2nd, and 12th Companies Shirván Regiment, 100 dismounted Cossacks, and 1 mountain gun.

These columns received special tasks as follows:—Major Sivinís' column, which was to assemble on the dam, was, on the explosion taking place, to crown the breach, construct epaulements in it for three guns and a mitrailleuse, and occupy the rampart on the left till it communicated with Colonel Kozelkoff's column, and on the right as far as No. 1 traverse. The column under Staff-Captain Fok, formed up in front of the Grand Duke's Kala, was to form a reserve for the first, and was to move up the breach after it had been crowned, and occupy the interior of the fortress. Colonel Gulyayeff's troops, which were to be formed up in the place-of-arms behind the Main Kala, were, on the mine being exploded, to occupy the Shirván Redoubt, the Turkistán Kala, the advanced trenches, the Sappers' Redoubt, and the communication to the second parallel, and open a heavy fire against the parapets. On these being captured, they were to cover the right flank and rear of the storming column and form its reserve.

By 8 A.M. all the troops of the right column were in their appointed places. The charges were placed in the chambers of the mine and tamped with sand-bags and earth, and these operations were finished by 10-40 A.M. At 11 A.M. General Grodekoff, Chief of the Staff, joined the column on the dam and handed over the orders to fire the mine at 11-20, and at the appointed time this was done. Large lumps of mud from the wall fell into the advanced trenches and among the troops lying behind the dam, the half company of volunteers under Sub-Lieutenant Mahometoff of the Militia being nearly covered with earth, and, before the smoke from the explosion had cleared away, Major Sivinís' column advanced from the dam and rushed up the breach.

Notwithstanding the force and unexpected nature of the explosion, which killed all the defenders on the rampart in the vicinity, the enemy quickly recovered and occupied the breach and the wall near it, opened a heavy fire on Major Sivinís' troops and engaged in hand-to-hand combat with the 10th (Podvisotski's) Company of the Shirván Regiment, but was beaten back and forced to retire among the *kibitkas* and mud huts near the wall. This attack was supported by 50 dismounted Ural Cossacks, who, as has been above mentioned, had been told off to support the attack by fire only, but who, in their desire to support their comrades, had also rushed forward to the breach. Here fell Lieutenant Kunakovski, who had gained his St. George's Cross on the 5th (17th) January for measuring the ditch, and Cossack Tetikoff, who had accompanied him in his dangerous undertaking. The 9th Company of the Shirván Regiment under Lieutenant Lemkul and Sub-Lieutenant Voropánoff's volunteers met with a still more obstinate resistance in occupying the rampart to the right and left of the breach; but after a fierce hand-to-hand fight they succeeded in occupying the parts of the wall nearest the breach, and opened a heavy fire from small arms and rockets from the wall on the reinforcements crossing the open space in the interior of the fortress to join in the defence of the breach.

When Voropánoff's volunteers had, at 11-30 A.M., occupied their part of the rampart, half of the 2nd Company Shirván Regiment from Colonel Gulyayeff's reserve column was sent to storm traverse No. 1, from which the enemy was enfilading the breach and the approaches to it. This attack was supported by the other half of the same company and a mountain gun from the Turkistán Kala; and the half company under Lieutenant Buligin occupied the traverse and joined hands with the company of volunteers, which had moved along the wall of the east front. At the same time Kuropátkin moved Fok's column forward to the breach and took personal command

of the 1st and 2nd columns. The general reserve (three companies) was moved up to the dam. By this time the Sappers had placed the first gabions on the breach, and a company was told off to bring up materials quicker from the reserve.

The further movements of these columns must next be described.

In consequence of the heavy losses suffered by the 9th Company of the Shirván Regiment, and its slow extension along the wall to meet Kozelkoff's column, it was strengthened by half of the Rifle Company of the 13th Turkistán Battalion under Sub-Lieutenant Agafonoff, which, doubling along the foot of the wall, bravely stormed it at 90 to 120 yards from the breach and came down on the rear of the Tekkes opposing Lemkul's company.

The infantry of Staff-Captain Fok's column (1st and half of the Rifle Company of the 13th Turkistán Battalion) and the 50 dismounted Ural Cossacks were now sent down from the breach and pushed towards the open space in the interior of the fortress. The enemy had to be driven out of many *kibitkas* and mud huts, which were only taken after a most obstinate resistance; and the heaps of Tekke corpses on the breach, on the walls of the fortress, among the *kibitkas* in the mud huts, and on the open space bore witness to the stubbornness of the defence.

At the same time, as these companies were moved on to the space in the interior of the fortress, the 9th Company of the Shirván Regiment and half of the Rifle Company of the 13th Turkistán Battalion joined hands with the troops of Colonel Kozelkoff's column. These troops then descended from the wall and drove the enemy out of the *kibitkas* and mud huts close to it; and then Colonel Kuropátkin sent orders to Major Sivinís to push the 9th and 10th Companies to the edge of the open space and make a barricade of the *kibitkas* at the edge facing the hill. To cover those works, the 1st and half of the Rifle Company of the 13th Turkistán Battalion and the 50 Cossacks were pushed forward. At the same time the breach was secured by a breastwork of gabions, and three mountain guns and a mitrailleuse were brought into action upon it.

The enemy had, apparently, begun to give way and retire to the hill of Dangil-Tapa, and part of them, as was reported from the observatory on the Volunteers' Kala, moved to the gates of the north front and went out into the desert. All the storming columns were, therefore, ordered to advance on the hill of Dangil-Tapa. As was evident from the orders, it had been contemplated on this day only to occupy the south-eastern part of the fortress and establish ourselves in it. From all the previous actions, we had been led to expect a most desperate resistance in the interior of the fortress, where, in consequence of the numbers of *kibitkas* closely packed together, the troops would have to engage in a fierce hand-to-hand fight. In the event, however, of the enemy seeming to waver and a possibility presenting itself of capturing the whole fortress at a blow, General Skobelev had given Colonel Kuropátkin verbal orders to advance on the hill of Dangil-Tapa.

For this advance Colonel Kuropátkin now detailed the 3rd Battalion of the Shirván Regiment, three Turkistán companies, 3 mountain guns, a mitrailleuse, and 100 dismounted Cossacks. The remaining troops of the column (1st Company Shirván Regiment, 1 mountain gun, and 1 mitrailleuse) guarded the rear and right flank of the force, and by their fire stopped a sortie made by the enemy against the Grand Duke's position, while two companies (volunteers and 2nd of the Shirván Regiment) and a rocket section received orders to move along the eastern wall and occupy the north-eastern angle of the fortress.

The advance against the hill was conducted as follows:—Staff-Captain Fok advanced with his column towards the western wall of the fortress, took the *kibitkas* here, and formed up with his front towards the hill of Dangil-Tapa; and behind him moved Lieutenant-Colonel Gulyayeff, with 100 dismounted Cossacks. Major Sivinís moved with two companies straight on the hill, and was followed by the reserve, consisting of the 3rd Company 5th Turkistán Battalion, the 12th of the Shirván, and the 9th of the Apsheron Regiment. The final attack was prepared by the fire of three mountain guns, and a report of the beginning of the advance was sent to General Skobelev. The advance was conducted in close order, with bands playing, drums beating, and colours flying; and the resistance of the enemy was overcome without much trouble. The most serious opposition was that met with by Captain Fok, who recaptured the two mountain guns which had been taken by the Tekkes in the sorties of the 28th and 30th December 1880 (9th and 11th January 1881).

Major Sivinís, on reaching a point 150 paces from the foot of the hill, fired on the *kibitkas* between his troops and it, and then charged through them right up to the hill. At 1 A.M. the colours of the 3rd Battalion Shirván Regiment were planted on the hill, and the companies, assisted by a mitrailleuse which had been dragged up by the sailors, opened fire on the enemy crowded in the north-west angle of the fortress. Half a company of Colonel Kozelkoff's column, composed of men of the 4th Battalion of the Apsheron, the Stavropol, and the 3rd Battalion of the Samur Regiment, took a most effective part in the storming of the hill. This half company had been brought up by Captain Melnitski of the General Staff, who had placed himself under Major Sivinís' orders.

The 3rd Company of the 5th Turkistán Battalion and the 9th of the Apsheron Regiment, both under Sub-Lieutenant Kamberg, had moved forward, bearing down all opposition, and turned the hill by the east, capturing the *kibitkas* right up to the northern wall, and occupying this latter. In taking the wall, this column had a hand-to-hand fight, in which we lost several men severely wounded by cold steel. The 12th Company of the Shirván Regiment, which had advanced on Kamberg's right, also reached the northern wall and occupied it. Moving along the eastern wall, the company of volunteers and the 2nd of the Shirván Regiment, with the rocket section, had captured the Tekke gun placed in the traverse at the north-eastern angle of the fortress, four flags, and the colour of the 4th Battalion Apsheron Regiment, which had been taken by the Tekkes on the night of the 28th December 1880 (9th January 1881), and which had been planted, uncased, on the wall. These companies then advanced to the north-eastern angle of the fortress, occupied part of the northern wall, and poured their fire at close ranges on the dense masses of Tekkes running from the fortress.

Colonel Kuropátkin now resolved to pursue the enemy at once, and sent the following report from the hill of Dangil-Tapa: "I congratulate you on a complete victory. The whole fortress is ours. Both the guns and the colour have been retaken. I am advancing beyond the northern face. Support by cavalry is desirable."

The pursuit of the retreating enemy was carried out on the left flank by Major Sivinís with $1\frac{1}{2}$ companies of the Shirván Regiment, in the centre by the 9th Company of the Apsheron Regiment, and on the right by the 12th of the Shirván Regiment. In rear of them followed, as a reserve, the three Turkistán companies and the volunteers under Staff-Captain Fok.

Colonel Kuropátkin's column, together with the cavalry which had been brought up through the fortress by the Commander of the Expedition, pursued the enemy for $6\frac{1}{2}$ miles, and was then ordered to return to camp.*

Colonel Kozelkoff's column had advanced on the breach made by the artillery in the following order:—At the head of the column were the volunteers of the 4th Apsheron Regiment, a detachment of miners, two rocket-troughs, and a mitrailleuse. Then followed the 4th Apsheron Regiment with four scaling-ladders; and, lastly, the 11th Company Stavropol Regiment, with gabions and fascines, and a section of Sappers to crown the breach. These troops were placed under Count Orloff-Denisoff, Aide-de-Camp. The remaining three companies of the Stavropol Regiment formed the reserve, and were to occupy the advanced trenches directly the 4th Apsheron Regiment left them.

Punctually at 11-20 A. M., after the explosion of the mine, the storming column left the trenches, crossed the Grand Duke's stream by the bridge, and moved on the breach with a cheer. It was met by a heavy fire, and by one of the first shots Count Orloff-Denisoff, who was following closely in rear of the volunteers of the Apsheron Regiment, was severely wounded. The column moved steadily forward, and crying "hurrah!" rushed up the breach, when it was met by a hail of bullets and stones. Arrived near the summit, the troops lay down and opened fire on the enemy. The three companies of the Stavropol Regiment and a division of the 6th Battery 21st Brigade were at once moved up to their assistance.

At the moment of the explosion of the mine, General Skobelev was in the third parallel with Kozelkoff's column, and, noticing the wavering and indecision of our troops on the breach, he at once sent up the 3rd Apsheron Regiment from the reserve. On the arrival of this battalion, all the others rose and boldly threw themselves on to the summit of the breach, which was taken after a hand-to-hand fight.

The colours of the 3rd Apsheron and 3rd Stavropol Regiment were planted on it, and two mountain guns brought into action close by them. As all the troops could not find room on the breach, those on the flanks had to escalate the wall with storming-ladders. In this short space of time the Commander of the 10th Company Stavropol Regiment, Lieutenant Merkhelev, was killed, and those of the 3rd Battalions of the Apsheron and Stavropol Regiments, Lieutenant-Colonels Popoff and Tsiprinski-Tsakavo, were severely wounded.

The 3rd Battalion of the Sámur Regiment, under Major Pegireff, which had been brought up into the third parallel so as to be under the hand of the Commander of the Expedition, on reaching the parallel did not halt in it, but rushed forward on the south-eastern angle of the wall, planted their storming-ladders, ascended by them, and at once began to extend along the rampart to the right to join hands with Kuropátkin's troops.

On the breach being occupied, it was at once put in a state of defence; but the success of Lieutenant-Colonel Haidaroff's column, the troops of which mounted the wall on the western face, and of Colonel Kuropátkin's column, which was now moving into the interior of the fortress, caused this work to be stopped, and the troops were directed to advance on the hill of Dangil-Tapa for the final capture of the fortress.

The six companies of the Daghistán and two of the Shirván Regiment, brought up by General Skobelev from the reserve, received orders to form a

* Report from Colonel Kuropátkin, No. 62, dated 14th (26th) January 1881.—*Author.*

reserve at the breach for the troops engaged in the interior of the fortress, and four guns of the 4th Battery 20th Brigade were brought up on to the breach.

The further advance of the troops was conducted in conjunction with those of Kuropatkin's and Haidaroff's columns, and the hill of Dangil-Tapa was occupied by a mixed half company led by Captain Melnitski and by the column of Major Sivinis. On the hill being taken, the 3rd Battalions of the Stavropol and Apsheron Regiments were brought up to it, while the 4th Battalion of the latter regiment was sent forward to pursue the enemy.

To capture the kala close to the hill and inside the fortress, a combined detachment with a mountain gun was sent under Captain Melnitski. After three rounds from the guns, parts of the 10th and 11th Companies of the Apsheron Regiment threw themselves into the kala and cut down all its defenders.

Towards evening the troops of Kozelkoff's column and those of the reserve, which had joined it, received orders—the 3rd Apsheron Regiment and the two mountain guns to occupy the hill of Dangil-Tapa, the 4th Daghistán Regiment and the 3rd Battery 19th Brigade to bivouac in the south-eastern angle of the fortress, and the remaining troops to return to camp.*

Immediately after the explosion of the mine, Lieutenant-Colonel Haidaroff, in his turn, advanced to the attack, and sent the 2nd and 4th Companies of the Sámur Regiment to escalate the western wall with scaling-ladders, while the 1st and 3rd Companies of this regiment, with the volunteers and the 4th Battery 19th Brigade, were moved along the ditch of the west front and against the enemy's position between the Opornoye stream and the fortress. The cavalry with the horse mountain guns were ordered to move quickly forward on the left flank of the force and pursue the retreating enemy. The 2nd and 4th Companies, under Captain Lavroff, moved straight against the western wall, planted their ladders, mounted the wall, and then moved along it, while the 1st and 3rd Companies and volunteers marched alongside the ditch, supported by a heavy artillery fire.

The kala of Muhammad-Kuli-Khán was occupied, and its defenders, who were inhabitants of Murcha, were all killed.† The cavalry and horse mountain guns followed the enemy in his retreat towards the north, while the infantry, on reaching the north-west angle, joined hands with the troops of Kuropatkin's and Kozelkoff's columns, halted, and afterwards returned to camp.

Taghma-Sirdár, who was the soul of the defence, had, after the explosion of the mine, attempted to rally the fugitives, and even cut down those who did not obey him; but seeing that it was impossible to make the people fight, he himself escaped. His son Akh-Verdi was killed by a shell.

Seeing the undoubted success of all the storming columns, General Skobelev sent orders about 1 p.m. to Colonel Prince Eristoff, Commanding the Cavalry Reserve, to move from the reserve into camp, mount, and come up to the artillery breach. At 2 p.m. the Commander of the Expedition put himself at the head of two squadrons of Dragoons and a *sotnia* of Poltáva Cossacks, and advanced through the fortress to the pursuit of the enemy, who were retreating in large masses to the desert, and at the same time the two *sotnias* of Taman Cossacks and the Horse Mountain Division from Haidaroff's column pushed forward on the left. The pursuit and slaughter of the enemy were continued for 10 miles, but the infantry, who followed the cavalry, halted at 6½ miles.

* Report from Colonel Kozelkoff, No. 146, dated 14th (26th) January 1881.—*Author*.

† Report from Lieutenant-Colonel Haidaroff, No. 49, dated 12th (24th) January 1881.—*Author*.

The approach of night, and the final dispersion of the enemy, forced the Commander of the Expedition to put an end to the pursuit and recall the troops to camp.

During the pursuit, the families of the Tekkes were collected and sent back by us to Dangil-Tapa, so as to have some hold on the inhabitants and to induce them to return to their homes with a view to the country becoming settled.

We captured two mountain guns, the colour of the 4th Battalion Apsheron Regiment, one bronze smooth-bore gun, two cast-iron *zemburaks*,* five flags, and 1,500 muskets, pistols, and swords.

Our losses on the 12th (24th) January were—killed 4 officers (Staff-Captain Grek of the 1st Turkistán Artillery Brigade, Lieutenant Merkholeff of the Stavropol Regiment, Lieutenant Kunakovski of the Ural Cossacks, and Ensign Moritz of the Trans-Caspian Local Battalion) and 55 men; wounded 18 officers† and 236 men, and contused 12 officers‡ and 73 men. 47 horses were killed and 24 wounded. The total loss was 398 of all ranks, of whom 25 in Haidaroff's, 146 in Kozelkoff's, 131 in Kuropátkin's column, and the remaining 76 in the troops brought up from the reserve. 273,804 rounds of infantry, 12,510 of cavalry and 5,504 of artillery ammunition, and 224 war rockets were expended.

The losses of the enemy during the storming were estimated at between 6,000 and 8,000 men. Among others, there fell on the wall Hazrat-Kuli-Khán, one of the Council of Four, and Muhammad-Atálik, who was considered the head of the Russian party. It was only on the fortress being taken that an idea could be formed of the terrible losses the enemy had suffered during the siege from our artillery and rifle fire. *Kibitkas* could be seen in which the dead, already decomposed, lay in the positions in which they had met their death. In fact, during the last days of the siege, the enemy had not buried his dead, but had piled them in heaps in various parts of the fortress.

The whole night parties of infantry and cavalry patrolled the fortress, as there were still many Tekkes in the *kibitkas* and pits who fired on single men. Every such *kibitka* or pit had to be taken and the Tekkes in it killed.

During the storming of the fortress, when it was still unknown what the result would be, the Commander of the Expedition had given orders for the whole camp to be moved into the Grand Duke's position, so as to be ready for a prolongation of the fight inside the fortress; but when he reached the

* Cast-iron guns throwing a ball weighing a pound mounted on wooden stands.—*Author*.

† *Battalion Commanders*: Lieutenant-Colonel Tsiprinski-Tsekavo, 3rd Stavropol Regiment; Lieutenant-Colonel Popoff, 3rd Apsheron Regiment; Count Orloff-Denisoff, Aide-de-Camp of 4th Apsheron Regiment.

Sapper Company:—Captain Hetschel.

Artillery:—Staff-Captain Mitkevitch-Volchanski and Lieutenant Yureneff.

Apsheron Regiment:—Staff-Captain Kharkevitch, Sub-Lieutenants Popoff and Dekhtereff, Ensigns Kashirinoff and Usacheff.

Stavropol Regiment:—Ensigns Dzerdziewski and Prince Andronikoff.

Daghistán Regiment:—Staff-Captain Davidoff.

Shirván Regiment:—Lieutenant Arkhayetski, Sub-Lieutenant Mahometoff of the Militia, Ensigns Ushakoff of the Guard Horse Grenadier Regiment:—Midshipman Mayer.—*Author*.

‡ *Apsheron Regiment*:—Lieutenants Kurmasoff and Benislavski, Sub-Lieutenants Jiznevski and Rudneff, Ensigns Lebedinski and Bogoslavski.

Shirván Regiment:—Ensign Constantinoff.

Artillery:—Ensign Ivánoff.

15th Dragoons:—Ensigns Forsten.

Taman Cossacks:—Cornet Chegrin.

1st Turkistán Rifle Battalion:—Lieutenant Kalitin.

13th Turkistán Line Battalion:—Lieutenant Danilovitch.—*Author*.

artillery breach, and had convinced himself that the enemy's resistance was already broken, he gave orders for the change of camp to be stopped. A few *kibitkas* had, however, already been moved to the new place. During the night of the 12th and 13th (24th and 25th) and next day all measures of precaution were taken as if the siege was still going on.

During January, and while the siege operations were going on before Gok-Tapa, all had been quiet on the lines of communication. Only on the 8th (20th) had six horsemen approached one of our posts at Khwāja-Kala; but these retired on a volley being fired at them. In the vicinity of Khār-Olum also traces of a band of 50 men were remarked.

To strengthen the siege corps before Gok-Tapa, the 9th Company Crimean Regiment was brought up on the 5th from Sámurskoye, and the 10th on the 8th (20th). To enable the latter to be brought up to Sámurskoye, and later on to camp before Gok-Tapa, Kalát was abandoned as an *étappen* station. The place of the 10th Company at Sámurskoye was taken by a company of the Trans-Caspian Local Battalion from Gok-Tapa.

Even before the capture of the fortress, the non-mobilized battalions of the force had, in consequence of losses in action and disease, become so weak, that the companies did not number more than 25 files. The mobilized battalions of the 21st Division and the 3rd Stavropol Regiment had also suffered considerable losses; and the Commander of the Expedition had, therefore, to ask for drafts to be sent from the Caucasus. These arrived at Krásnovodsk in the end of January.

During the whole of the siege, the supplies concentrated at Sámurskoye had been brought up to the supply-depôt in camp on the waggons of the wheeled transport; and the troops were at no time in want of supplies, except of meat, which on two days was not delivered by the contractor. This was caused by the great danger of the road to Garm-Áb, where the contractor had his supplies of cattle, and the Commander of the Expedition could not give Gromoff's agent an escort further than the foot of the hills. On the days when the troops received no fresh meat, preserved meat was issued to them.

The military field telegraph was opened from Kizil-Arvat to Bámi on the 14th (26th) January, and there was then through communication with Russia. The railway was not pushed forward on account of want of sleepers.

APPENDICES.

APPENDICES TO

APPENDIX

PROJECT FOR THE MARCH OF THE SUPPLY-CONVOYS FROM KRÁSNOVODSK AND
AND 8TH (20TH)

DESCRIPTION OF SUPPLIES.	MANGISHLÁK CONVOYS FROM MULLA-KÁRI.				
	1ST JOURNEY.		2ND JOURNEY.		TOTAL.
	1,800 camels.	900 camels.	1,500 camels.	700 camels.	
	A.	B.	A.	B.	
	Leave 20th September (2nd October), reach Bámi 1st (13th) October, return to Mulla-Kári 10th (22nd) October.	Leave 25th September (7th October), reach Bámi 5th (17th) October, return to Mulla-Kári 16th (28th) October.	Leave 22nd October (3rd November), reach Bámi 2nd (14th) November.	Leave 24th October (5th November), reach Bámi 4th (16th) November.	
A.—Supplies.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Eye-flour	1,760	2,240	...	1,600	5,600
Biscuits	703	...	...	...	703
Buckwheat groats	320	...	2,240	...	2,560
Rice groats	384	...	576	...	960
Cakes	243·2	...	...	...	243·2
Salt	192	...	...	...	192
Tinned meat	32	...	...	80	112
Onions	3·84	...	...	...	3·84
Wheat flour	768	...	960	...	1,728
Pepper	1·76	...	...	...	1·76
Horse biscuits ... ..	...	...	...	...	...
Laurel leaves	·96	...	...	...	·96
Garlic ... ..	...	...	...	...	...
Ghee ... ..	...	...	...	...	...
Tea	25·6	...	...	...	25·6
Sugar	134·4	...	...	...	134·4
Fruit acids ... ..	...	...	...	...	...
Total	4,633·76	2,240	3,776	1,680	12,329·76

CHAPTER XII.

LIX.

MULLA-KÄRI TO BÄMI BETWEEN THE 21ST SEPTEMBER (3RD OCTOBER) NOVEMBER 1880.

ORENBURG CONVOYS.					GROMOFF'S CAMELS.			
1ST JOURNEY FROM KRÄSNOWODSK.			2ND JOURNEY FROM MULLA-KÄRI.	TOTAL.	1ST JOURNEY FROM MULLA-KÄRI.	2ND JOURNEY FROM MULLA-KÄRI.	TOTAL.	GRAND TOTAL.
C.	D.	E.	C.					
1,476 camels, leave 21st September (3rd October), reach Bami 7th (19th) October, return to Mulla-Käri 17th (20th) October.	1,750 camels, leave 5th (17th) October, reach Bami 20th (November), return to Mulla-Käri 1st (13th) November.	1,800 camels, leave 24th (October) (1st November), reach Bami 5th (17th) November, return to Mulla-Käri 15th (27th) November.	1,200 camels, leave 25th (October) (6th November), reach Bami 6th (18th) November.		1,500 camels, leave 25th September (7th October), reach Bami 10th (22nd) October, return to Mulla-Käri 20th (November) (1st November).	1,000 camels, leave 25th (October) (9th November), reach Bami 8th (20th) November.		
Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
...	...	1,020	1,600	3,520	1,600	...	1,600	10,720
3,840	1,020	...	...	5,760	...	...	...	6,528
...	...	960	320	1,280	1,536	...	1,536	5,376
...	640	...	...	640	...	752	752	2,352
...	...	...	...	...	...	1,632	1,632	1,975.2
...	...	...	320	320	...	...	...	512
...	...	...	...	...	...	...	...	112
...	64	...	...	64	...	64	64	16.64
...	1,280	480	320	2,080	...	...	...	3,808
...	16	...	...	16	...	3.2	3.2	20.96
...	422.4	...	...	422.4	...	...	...	422.4
...	19.2	...	...	19.2	...	3.2	3.2	23.36
...	...	...	...	...	...	32	32	32
...	...	1,280	330	1,600	...	...	...	1,600
...	...	...	...	...	128	...	128	153.6
...	...	...	...	...	640	...	640	771.4
...	320	...	96	416	...	...	...	416
3,840	4,624	4,640	2,976	16,080	3,904	2,428.8	6,332.8	34,742.56

APPENDIX

*Project for the march of the supply-convoys from Krásnovodsk and
and 8th (20th)*

DESCRIPTION OF SUPPLIES.	MANGISHLÁK CONVOYS FROM MULLA-KÁRI.				
	1ST JOURNEY.		2ND JOURNEY.		TOTAL.
	1,800 camels.	900 camels.	1,500 camels.	700 camels.	
	A.	B.	A.	B.	
	Leave 20th September (2nd October), reach Bámi 1st (13th) October, return to Mulla-Kári 10th (22nd) October.	Leave 25th September (7th October), reach Bámi 5th (17th) October, return to Mulla-Kári, 16th (28th) October.	Leave 22nd October (3rd November), reach Bámi 2nd (14th) November.	Leave 24th October (5th November), reach Bámi 4th (16th) November.	
<i>B.—Drivers' and escorts' luggage, &c.</i>	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
One month's supplies for one company ...	170	176	176	112	640
One month's supplies for one <i>sotnia</i> ...	80	...	...	...	80
Forage for one month for one <i>sotnia</i> ...	102	...	...	...	102
Baggage of the company and <i>sotnia</i> ...	80	32	43	32	192
<i>Yulameikas</i> ...	64	32	64	48	208
Water-casks ...	96	48	64	48	256
One month's supply for drivers ...	240	112	192	96	640
Spare camels (3·2 cwt. each) ...	198·4	240	480	224	1,142·4
Total ...	1,126·4	640	1,024	560	3,350·4
GRAND TOTAL ...	5,760·16	2,880	4,800	2,240	15,680·16

LIX—continued.

Mulla-Kári to Bámi between the 21st September (3rd October) November 1880—continued.

ORENBURG CONVOYS.					GROMOFF'S CAMELS.			
1ST JOURNEY FROM KRÁSNODOVSK.			2ND JOUR- NEY FROM MULLA- KÁRI.	TOTAL.	1ST JOUR- NEY FROM MULLA- KÁRI.	2ND JOUR- NEY FROM MULLA- KÁRI.	TOTAL.	GRAND TOTAL.
C.	D.	E.	C.		1,500 camels, leave 25th September (7th Octo- ber), reach Bámi 19th (22nd) Octo- ber, return to Mulla- Kári 20th October (1st November).	1,000 camels, leave 28th October (9th November), reach Bámi 8th (20th) November.		
1,476 camels, leave 21st September (3rd Octo- ber), reach Bámi 7th (19th) Octo- ber, return to Mulla- Kári 17th (20th) Oc- tober.	1,780 camels, leave 5th (17th) Octo- ber, reach Bámi 20th October (1st Novem- ber), return to Mulla-Kári 1st (18th) November.	1,800 camels, leave 2d th October, 1st November, reach Bámi 5th (17th) November, return to Mulla-Kári 15th (27th) November.	1,200 camels, leave 25th October (3th November), reach Bámi 6th (18th) November.					
Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
176	176	176	176	704	176	176	352	1,696
...	...	...	...	...	...	...	...	80
...	...	...	...	...	...	...	...	192
48	48	48	32	176	48	32	80	448
64	64	64	64	256	64	64	128	592
64	64	64	64	256	64	64	128	640
185·6	240	240	144	809·6	192	144	336	1,785·6
441·6	473·6	528	384	1,827·2	362	291·2	653·2	3,622·8
979·2	1,065·6	1,120	864	4,028·8	906	771·2	1,677·2	9,058·4
4,819·2	5,689·6	5,760	3,840	20,108·8	4,810	3,209	? 7,010	43,798·96

APPENDIX LX.

SCALE OF SUPPLIES FOR ONE MONTH FOR THE ARMY OF OPERATIONS.

For one month's supply for the Army of Operations (7,000 men and 3,000 horses), the following are the principal articles in the proportion noted :—

					Cwt.
Biscuit	3,840 cwt., or rye-flour	...	...	...	4,032
Buckwheat	groats	...	...	...	864
Salt	...	...	...	...	179·2
Tea	...	...	...	...	19·2
Sugar	...	...	...	...	115·2
Spirits	...	...	...	...	190
Ghee	...	...	...	...	89·6
Total				...	25,491·2

In addition, for 1,000 Asiatics (camel-drivers and *Jigits*) are required :—

					Cwt.
Wheat-flour	...	...	...	...	480
Rice	...	...	...	...	184
Ghee	...	...	...	...	60·8
Tea	...	...	...	...	3·84
Sugar	...	...	...	...	16
Salt	...	...	...	...	25·6
Total				...	770·24
Grand Total				...	26,261·44

Also the following articles :—

					Cwt.
Fruit acids	...	...	...	...	89·6
Vegetables for <i>kvass</i>	...	...	...	...	864
Garlic	...	...	...	...	70·4
Onions	...	...	...	...	16
Pepper	...	...	...	...	2·88
Laurel leaves	...	...	...	...	2·88
Wheat-flour	...	...	...	...	70·4
Rice	...	...	...	...	582·4
Vinegar* (351 gallons)	...	...	...	...	41·6
Total				...	1,740·16

Oats, allowing 10·35 lbs.† *per diem* per horse, 7,642·88 cwt. These articles should be sent up to the front in the order of their relative importance—first, 6,261·44 cwt. of provisions; then, 7,642·88 cwt. of oats; and, lastly, 1,740·16 cwt. of products,—in all, 15,644·48 cwt.

* 2·7 gallons of vinegar here appear to be reckoned as = 36 l lbs.—*J. M. G.*

† 3 *garnets*. The calculation is made on the supposition that the oats run 38 lbs. to the bushel (British Government contract weight).—*J. M. G.*

APPENDIX LXI.

CONTRACT WITH THE MERCHANT GROMOFF FOR THE TRANSPORT OF SUPPLIES
FROM KRÁSNOVODSK AND MULLA-KÁRI TO BÁMI.

On the 17th (29th) October 1880, this contract has been concluded, on the basis of orders given by the Temporary Commander of the Troops in Trans-Caspia, between the Intendant of the Force and Alexander Yegoroff Gromoff, merchant of the 1st Guild of Tashkand, for the transport of stores from Krásnovodsk and Mulla-Kári to Bámi on the following conditions:—

(1) I, Gromoff, instead of the contract concluded by me on the 23rd April (5th May) of this year with the authorities of the Sir-Daria District to deliver camels in Fort Krásnovodsk, engage to carry not less than 30,000 *puds* (9,600 cwt.) of stores per month from Mulla-Kári to Bámi at 2 *roubles* 30 *kopecks per pud* for eight months beginning from the 23rd September (5th October) of this year, in return for the money paid as laid down in the abovementioned contract. If, however, the Government finds it necessary to stop this transport of stores after four months, it has the right to do so on condition that I, Gromoff, have a month's warning of this intention. On the transport of these 240,000 *puds* of stores being completed, I, Gromoff, am bound to continue to carry stores over and above this quantity at 2 *roubles* 30 *kopecks a pud* in such quantity only as I consider possible, but not less than 20,000 *puds* per month. The loading and unloading of the camels are to be performed by my men, but ropes are to be given by Government.

(2) In the event of any of the stores being delivered at intermediate points on the line between Mulla-Kári and Bámi and onwards, I, Gromoff, am to receive payment for such stores in proportion to their weight and the number of *verst*s they have been carried. A correct list of distances is to be given to me, Gromoff, by the authorities in Trans-Caspia.

(3) For 1,349 camels taken over by Government from me, I am to receive from Government 25 *roubles* per month, for 761 camels from the 15th (27th) August and for 588 camels from the 19th (31st) August, according to the contract of the 23rd April (5th May) requiring them to be paid for from the day of their arrival at Mulla-Kári, or, with my consent, at Bámi. I, Gromoff, am to have no claim for compensation for those which have died or been left behind, and I am to take over the number actually present, but payment is to be made from the day of my taking over the camels in Mulla-Kári for the same number of camels as was received from me at Krásnovodsk.

(4) As part of the stores have to be taken straight up from Krásnovodsk to Mulla-Kári, I, Gromoff, am to be paid $\frac{2}{10}$ *th*s *kopeck per verst* and *per pud* for every *pud* laden on my camels at Krásnovodsk.

(5) Whatever stores are handed over to me at Krásnovodsk or at Mulla-Kári, I, Gromoff, am to deliver at Bámi to the Superintendent of the supply-depôt, and shall be given a receipt by him for them. I am to receive payment only for the weight of supplies delivered, including the packing materials, but without mats, tarpaulins, or other coverings or packing ropes. Over and above the wear and tear allowed by law, I am not only to receive no payment for deficiencies, but I am bound to make good their value. I, Gromoff, am bound also to take over covering mats and pack-saddle tarpaulins from the stores and send them back free of charge to Mulla-Kári.

(6) Payments are to be made to me, Gromoff, by the Intendence of the Force at Bámi, and, if this department is transferred to any other place, then

at that place, and on presentation of my receipt from the Superintendent of the supply-depôt, in which are to be entered:—The weight of the stores delivered and especially the weight of the packing materials, in what column of the ledger the stores were entered on delivery, in what kind of packages they were made up, and what quantity of each description of stores was deficient from that delivered to me. Then the Intendance Authority, who is to pay over the money, less that deducted for loss over and above any occurring through fair wear and tear, is to hand me the payment for the stores delivered. No payment will be made on receipts not made out according to the above conditions till they have been replaced by corrected ones, and the person giving the receipt is responsible that these conditions are complied with.

(7) In payment of the 70,000 *roubles* taken by me, Gromoff, from the treasuries at Tâshkand and Petro-Alexandrovsk, 17,500 *roubles* are to be deducted from the first four payments made to me for the carriage of 30,000 *puds* of stores each time. But if I, Gromoff, in the course of a month, transport less than 30,000 *puds* weight of stores, then 17,500 *roubles* is still to be deducted in payment of the above advance and only the balance handed over to me.

(8) In case of necessity, I, Gromoff, may draw supplies for the camel-drivers from Government stores, but only at Krâsnovodsk or at Mulla-Kâri, and the payment for them is to be stopped from the first sums paid to me. After that, neither at Bámi nor at any other point am I under any circumstances to have the right to draw supplies for these men.

(9) In the event of the Commander of the Troops considering it necessary to move Gromoff's camels beyond Bámi or to any side of the line Mulla-Kâri-Bámi, then—

(a) Gromoff is to be paid one *rouble* per day in silver for each camel so taken, regardless of whether it perishes from overwork or is lost by the fortune of war. The payment is to be made for the whole time the animal is being so used, *i.e.*, from the day of its being taken to the day of its being brought back to the same place.

(b) The quantity of stores which would otherwise have been carried up the line to Bámi by this animal is to be deducted from the quantity which Gromoff is otherwise pledged to transport.

(10) Rations are always to be issued to the camel-drivers, or ration-money is to be paid into their hands according to the agreement made with them, but always in the presence of the military commandant of the station where they may be temporarily, and a certificate of their having been so rationed is to be given by such commandant. The Temporary Commander of the Troops retains to himself the right of attending to the wants of the camel-drivers, either personally or through an officer, or official, or Controller deputed by him, according to the contract concluded with Gromoff. If no written conditions exist, the Temporary Commander of the Troops has the right to demand that Gromoff shall put his drivers on the same footing as regards pay and rations as those of the Government convoys. In this case, the drivers will be supplied from Government stores, and the articles will be charged to Gromoff at cost price *plus* 50 per cent.

(11) By decision of the Commander of the Troops, no earnest-money will be required from Gromoff for the performance of this contract, and in case of any recoveries having to be made, they will be deducted from the sum due to him for transport, as Gromoff is liable to confiscation of all his movable and immovable property wherever such be found.

(12) If the monthly supply of 30,000 *puds* mentioned in this contract be not delivered within the stipulated time, 10 per cent. of the sums which would be due to Gromoff for all such stores not delivered will be deducted from the sums which are due to him for stores delivered.

(13) Accounts will be finally settled with Gromoff, according to the amount of the contract, on stamped paper.

(14) This contract will be kept sacred and inviolable by both parties.

(15) In all questions not specified in this contract, the rules for military contracts and the common law of the empire will be taken as guides.

(Sd.) KHOJAYEFF, *College Assessor,*
Acting Intendant of the Trans-Caspian Force.

(Sd.) ALEXANDER YEGOROFF GROMOFF,
Merchant of the 1st Guild of Tashkand.

"I confirm this contract."

(Sd.) SKOBELEFF, *General, A.-D.-C.,*
Temporary Commander of the Troops in
Trans-Caspia.

APPENDIX LXII.

CONTRACT WITH TEROGÁNOFF FOR THE TRANSPORT OF INTENDANCE STORES FROM THE CHIKISHLIAR AND DUZ-OLUM SUPPLY-DEPÔTS TO THE ADVANCED POINTS ON THE ATRAK LINE.

On the 10th (22nd) September 1880, we, Councillor Kalnitski, Intendant of the Trans-Caspian Force, acting on personal orders from the Commander of the Troops, and Stephen Terogánoff, citizen of Shusha, have concluded this contract for the transport of provisions, forage, sea-stores, and other Intendence articles from the Chikishliar and Duz-Olum supply-depôts to the advanced posts on the Atrak line from Chikishliar *via* Band-Hassan to Bámi, for the period from this date to the 1st (13th) May 1881, on the following conditions:—

(1) I, the contractor Terogánoff, promise to transport from the Chikishliar and Duz-Olum supply-depôts provisions, forage, sea-stores, and other articles to the following extent, at prices proposed to me by the Commander of the Troops, as follows:—

		Number of <i>puds.</i>	Price per <i>pud.</i>	Total <i>roubles.</i>
(a) From Chikishliar to Kárajá-Bátir	...	10,000	45 <i>kopecks</i>	4,500
" to Yáglí-Olum	...	17,000	72 <i>kopecks</i>	12,240
" to Chát	...	7,000	95 <i>kopecks</i>	6,650
" to Duz-Olum	...	9,000	1 rouble 45 <i>kopecks</i>	13,050
" to Társakan	...	13,000	1 rouble 90 <i>kopecks</i>	24,700
" to Khwája-Kala	...	7,000	2 roubles 57½ <i>kopecks</i>	18,025
" to Band-Hassan	...	26,000	2 roubles 95 <i>kopecks</i>	76,700
(b) From Duz-Olum to Társakan	...	4,000	45 <i>kopecks</i>	1,800
" to Khwája-Kala	...	6,000	1 rouble 12½ <i>kopecks</i>	6,750
" to Band-Hassan	...	6,000	1 rouble 50 <i>kopecks</i>	9,000
Total	...	105,000	.....	173,415
For carrying stores from Chikishliar to Bámi	...	...	3 roubles 25 <i>kopecks</i>	...
From Duz-Olum to Bámi	...	...	1 rouble 80 <i>kopecks</i>	...

This quantity of stores may be increased or diminished within the time in which the contract is to be fulfilled; but such increase or diminution shall not be greater than one-fourth of the amounts specified in the contract.

If, by reason of unforeseen circumstances, it should be necessary to transport more than the increased quantity of stores specified above, the Intendant of the Force has, during the time for which the contract holds good, no right to apply to another contractor, but must ascertain whether I consent to transport such increased quantity at contract prices, and only in case of my refusal may he seek for other means of transport. I, Terogánoff, undertake to transport the stores in such a manner that at no time at any of the above-mentioned points shall there be a want of supplies for the troops stationed there or passing through, and in any case I undertake to transport by the 1st of January to the above points not less than 55,000 *puds*, of which 10,000 *puds* from Duz-Olum, and the remaining 50,000 *puds*, under the above conditions, by the 1st (13th) May of next year.

(2) The transport of Intendance stores from the Chikishliar supply-depôt is to be carried out on an order from the Intendant of the Force, and from Duz-Olum on that of the Superintendent of the Dépôt, according to instructions received by him from the Intendant. Orders for the transport of stores from the Chikishliar dépôt are to be given simultaneously to me, Terogánoff, and to the Superintendent of the Magazine, as for the transport of stores from Duz-Olum, I, Terogánoff, or the representative whom I am bound to have on the spot, shall be informed by the Superintendent in good time of stores being prepared for transport. In any case, the demands for transport are never to exceed that required for 5,000 *puds* at any one time. If, however, I, Terogánoff, furnish transport for a larger quantity of stores than is mentioned in the order, that quantity is to be sent off, if it is ready; in the event of its not being ready for transport, I am to have no right to claim compensation.

(3) In the orders are to be specified in figures and in words the quantity of stores to be transported, and the place at which the stores are to be delivered. The bales, rolled up in mats, are not to exceed 6 *puds* in weight, and are to be got ready in good time, so that I, Terogánoff, on receiving the order and bringing the transport animals to the Superintendent, may be able to load them and despatch them to the front on that same day.

(4) To avoid misunderstandings and disputes between the contractor and the Superintendent of the Supply-Depôt as to the weight of stores to be despatched, and as to whether the bales are properly packed, a military committee is to be appointed to inspect the stores awaiting transport. This committee, in my presence or in that of my representative and in that of the Superintendent, is to inspect the stores, see that they are properly packed, weigh them, and draw up a form of proceedings showing at what point the stores are to be delivered, how many bales there are, in what they are packed, what is in them, and the weight of the bales and packing materials. Having thus determined the quantity of stores to be transported, the Superintendent is to enter them in the issue book, according to the proceedings of the committee, and is to hand over to me, Terogánoff, or to my representative, the way-bills, in which are to be entered a detailed description of the stores, the number of packages, the weight of the stores, and that of the packing materials; the weight and number of loose articles, such as tarpaulins, mats, bags, and sacks, sent up to the advanced points, are also to be shown. Then I or my representative must take over the stores and sign for their receipt.

(5) I, the contractor Terogánoff, having taken over the stores under the above conditions, am responsible only for their weight and the good state of

the bales and barrels, but not for the quality of their contents, except in such cases when it is discovered that the packages have been disarranged or any change made in them; and I am also responsible for their having been spoiled or wetted up to their cost price, but only till they have been delivered to a supply magazine. On their being so handed over I am freed from responsibility, and that responsibility is transferred to the person taking them over. To preserve the stores during transport, a sufficiency of covering materials is to be issued to me, Terogánoff, from the magazines.

(6) On the arrival of the convoy with the stores at its destination, I, Terogánoff, am bound to produce the way-bill and hand over the stores at the place pointed out to me. The stores are to be taken over by the person appointed for that purpose with the least possible delay, and after an inspection of the outside of the bales. The receiving officer, after inspecting the outside of the bales, is, on the same day, in the presence of the person handing them over to him, to weigh the stores delivered and give a receipt for them, on which are to be entered in detail—whence the stores have arrived, and on how many camels or *arabas*; how many packages there were, in what they were packed, and the weights of the products and of the packing materials. If it should happen that some of the packages have been damaged outwardly, or that some of the stores have been wetted on the road, a military board is to be assembled to determine how many packages or barrels have been damaged, and to what extent; whether the damage will have a bad effect on the quality of the stores, and how much of the stores have been spoiled; and all this is to be noted in the receipt. In cases when the stores transported turn out to be of bad quality, but show no signs of having been wetted or damaged outwardly, the receiver cannot refuse to take them over or to give a receipt for them, even though he proceed to further measures according to law.

(7) In the event of an accumulation of covering materials, such as tarpaulins and sacks, at the advanced supply-depôts, I, Terogánoff, am bound to take over those materials for conveyance back to such points as may be ordered free of charge, on condition that the camels are not detained at the supply-depôts from which the said materials are to be despatched. The packages of those materials must therefore be got ready in good time.

(8) All such means of transport for the stores as may be found necessary are to be supplied by me, Terogánoff; but the packages are to be made up and loaded on delivery from the supply-depôt by Government working parties.

(9) Camels belonging to me, Terogánoff, are not to be sent on further than the point to which stores are consigned; but, if it happens that the exigencies of the service cause my camels to be impressed or requisitioned by the military authorities, for each such impressed camel I, Terogánoff, am to receive 100 *roubles* besides payment according to contract for stores carried up to the place of impressment, and then the animal is to become Government property; and also if it happens that my camels are captured on the line of march by the enemy or killed, or injured to such an extent that they become unfit for further service, and if it appears that such attack could have been prevented by troops, I, Terogánoff, am to receive 75 *roubles* for each camel so lost. The commanders of the escorts are to be provided with instructions as to the order of march of the convoys.

(10) In cases of extreme necessity, I, Terogánoff, have the right to draw supplies upon payment for my camel-drivers and camels from the supply-depôts at their actual cost to Government, including transport to the place at which I receive them, but only on condition that such issues are possible in

the state of the depôt at the time, and the Superintendent is to provide me with an account-book in which the amount of supplies issued is to be entered.

(11) I, Terogánoff, on taking over stores from a depôt, am responsible for the preservation of the Government property transported by me from the date of its being so taken over. If there is any loss of the products during transport, I am only responsible for the loss above that stated in the table of abatements for waste, evaporation, and leakage laid down at page 233, Book XII of the Code of Laws, Edition of 1869, which abatement is to be calculated for each convoy separately. In the event of there being a greater diminution of weight than that allowed by law as above, I am bound to make good the deficiency to Government in kind or in money at cost price. For repayment of supplies in kind, I am to be allowed a month's grace from the date of the deficiency being discovered; and, if they are not replaced within this period, I lose my right to so replace them. To protect the interests of Government till such repayment in kind is made within the fixed time, at the first payment of monies to me the cost price of such supplies is to be deducted, and mention made of it in the account made up at each payment, which sums are to be returned to me on the losses being made good in kind within the fixed time. Besides these deductions, I, Terogánoff, am liable to pay the following sums for covering materials (mats, tarpaulins, sacks, and bags) lost by me at the following rates:—For such issued new and to be returned as 3rd class, the full cost of manufacture; and for such issued as 2nd class, half the cost of manufacture; but for such issued as 3rd class, I am liable to no deductions.

(12) While taking the responsibility for the preservation of Government stores during transport from the date of their issue from one depôt to that of their delivery at another, I am freed from all such responsibility in the event of the convoy being plundered by the enemy, when it appears on enquiry that, in spite of all measures taken by the troops of the escort, such plundering could not be prevented. In such a case payment is to be made for the number of *puds* shewn in the way-bill as having been carried from the place of despatch to the point where this occurrence took place. In such a case, I am to be satisfied with such payment, and also in the case of the military authorities finding it necessary to turn back any convoy before it has reached its destination. Escorts are to be detailed from the troops for the security of the convoys, and the camel-drivers are to obey all orders for the march of the convoy given by the commander of the escort, and are to unload the camels at halts. Halts are to be made at places where the camel-drivers think proper, if no danger is incurred by the convoy by so doing. Camping grounds should be chosen near water.

(13) I, Terogánoff, am to receive payment for transport of stores of any kind, including packing materials, by the *pud*, for the quantity actually carried and delivered at the place to which it is consigned; and I am also to be paid for new materials, such as tarpaulins, mats, bags, and sacks, sent up to the advanced depôts; but I am to receive no payment for such materials as may be issued to protect the stores from damage on the line of march. I have no right to demand payment for such unserviceable materials as may be sent to roll barrels up in to prevent leakage. Payment upon my receipts for stores carried is to be made at Chikishliar.

(14) As a guarantee for the punctual fulfilment of the contract entered into by me, Terogánoff, for the transport of Intendance supplies, by decision of the Commander of the Troops, General Skobelev, Aide-de-Camp, I have to deposit

earnest money to the extent of 10 per cent. of the contract sums, namely, 17,350 *roubles*, which sum is to be deducted from the first payment made to me for transport of stores or for other services rendered, but till such payment 200 of my camels at present at Chikishliar are to be security, and I am to give a special certificate to this effect. It is to be considered a breach of contract if I, Terogánoff, after accepting this contract, do not within 15 days furnish means of transport, or if I do not transport the amount of stores laid down within the fixed time, or if I refuse to fulfil any part of the contract. The earnest money deposited by me is to be retained till the contract is fulfilled.

(15) As no stamped paper is available, the tax on this contract will be deducted when accounts are finally settled, and all papers issued by me are to be paid for according to the established tax.

(16) In any case not here provided for, the rules of the military administration as regards contracts are to be taken as a guide.

(Sd.) KALNITSKI, *Councillor,*

Acting Intendant of the Trans-Caspian Field Force.

(Sd.) STEPHEN TER-OGANOFF,

Citizen of Shusha, Merchant of the 1st Guild of Baku.

"I approve."

(Sd.) SKOBELEFF, *General, A.-D.-C.*

KRÁSNOVODSK;

The 10th September 1880. }

APPENDIX LXIII.

CONTRACT WITH GROMOFF FOR THE TRANSPORT OF SUPPLIES FROM THE CHIKISHLIAR SUPPLY-DEPÔT TO DUZ-OLUM AND BÁMI.

On the 17th (29th) October 1880, the College Assessor Khojáyeff, Acting Intendant of the Trans-Caspian Field Force, and Alexander Yegoroff Gromoff, Merchant of the 1st Guild of Táshkand, have concluded a contract, on the basis of orders given by General Skobelev, Temporary Commander of the Troops in Trans-Caspia, as follows:—

(1) I, Gromoff, bind myself to undertake—(a) to transport from the Chikishliar supply-depôt to Duz-Olum by the 22nd October (3rd November) at the latest not less than 25,000 *puds* of Intendance stores; (b) to transport from Duz-Olum to Bámi 50,000 *puds* of oats and other stores, of which 25,000 *puds* by the 1st (13th) and 25,000 by the 15th (27th) November; (c) to furnish at Chikishliar the necessary number of camels to carry artillery stores and troops' baggage. I, Gromoff, am to be informed of the exact number required by the Road Commandant in 10 days.

(2) The Intendance stores in packages weighing not more than 6 *puds* each are to be got ready in good time, so that when I, Gromoff, furnish the transport there may be no delay in starting. I, Gromoff, for my part, am to inform the Intendant of the Force and the Superintendent of the Supply-Depôt, not less than two days beforehand, of the number of camels which will be furnished by me.

(3) On each despatch of stores, the Superintendent of the Dépôt is to draw up a way-bill shewing what stores have been sent, the number of packages, and the weight of the stores and of the packing materials, for the receipt of which I or my representative will sign in the issue-book. As for artillery stores and troops' baggage, receipts are to be given by the Road Commandant for the number of camels furnished by me, Gromoff, shewing for what corps and to what point the camels were taken, and what quantity of baggage or stores was carried. Troops' baggage is to be so packed for transport that not less than 20 *puds* (722 lbs.) is carried on each camel.

(4) I, Gromoff, having received the stores from the supply-dépôts, am responsible for the preservation and weight of the bales or barrels, but not for the quality of their contents, except in such cases when it is evident that the bales have been tampered with, or if the stores have been wetted or spoiled on the road, and I have to pay for such spoiled stores at cost price to Government, but my responsibility only lasts till the stores are handed over to a supply-dépôt; on the stores being handed over and receipt given, the responsibility is transferred to the receiver. Covering materials are to be supplied to me to protect the stores on the march.

(5) On the arrival of the convoy at a supply-dépôt, I, Gromoff, am bound to hand over the way-bill and unload the stores at the appointed place; they shall be taken over within 48 hours, and on their being taken over a receipt shall at once be given stating what has been delivered, the number of packages, the weight of the stores and that of the packing materials. If it should happen that some of the packages delivered are damaged, or have changed in outside appearance, or have been wetted on the road, a military board is to assemble, the deliverer of the stores being present, and the state of the stores thus inspected is to be noted in the receipt. If the stores are in bad condition, but without signs of having been wetted or damaged on the outside, the receiver must take them over and give a receipt, but may take further measures as provided for by law.

(6) All such materials for transport as are required, packing materials, and working parties for loading the stores on despatch from the supply-dépôt are to be furnished by Government.

(7) I, Gromoff, having taken over stores from a supply-dépôt, am responsible for the preservation of Government property till it is again handed over by me, except in the case of artillery stores and troops' baggage, which the troops are to be responsible for, as these stores will be in their charge. If, during the transport of Intendance stores, they are in any way spoiled, I, Gromoff, am only answerable for any loss over and above that allowed by law and laid down in the table of loss of weight, evaporation, and leakage allowed in pack transport. If the loss is greater than that allowed by the table, I am bound to make the amount good to Government in money, such sums being deducted from the payments made to me for transport according as my accounts are settled up from time to time.

(8) While becoming responsible for the preservation of Government property transported by me from the day of its receipt from one dépôt to the day of its being handed over to another, I am freed from this responsibility in the event of the convoy being plundered by the enemy, when on enquiry it appears that this might have been prevented by troops. In such case, I am to be paid for transport from the place of receipt to the point where this occurrence took place; I am to be satisfied with such payment, and also in the event of a convoy being ordered back by the military authorities and not

reaching its destination. Escorts are to be furnished by the troops to protect the convoys if thought necessary. The camel-drivers are to conform strictly to the orders issued by the military commander.

(9) I, Gromoff, am to be paid by the *pud* for stores transported, including packing materials, but exclusive of ropes, each *pud* actually transported and conveyed to its destination being so paid for; and I am also to receive payment by the *pud* for covering materials (tarpaulins, bags, mats, and sacks) sent up to the advanced points, but not for such materials issued to me for use on the road. I am not to be paid for unserviceable materials and to wrap round barrels to prevent leakage. Payment per *pud* is to be made as follows:—From Chikishliar to Duz-Olum, 1 *rouble*, 45 *kopecks*; from Duz-Olum to Bámi, 1 *rouble*, 80 *kopecks*; and if it should happen that stores are required to be delivered at any intermediate points between Duz-Olum and Bámi, the rates will be also by the *pud* as follows:—From Duz-Olum to Társakan, 45 *kopecks*; to Khwája-Kala, 1 *rouble*, 12½ *kopecks*; and to Band-Hassan, 1 *rouble*, 50 *kopecks*. Payments are to be made on presentation of my receipts for goods transported by the Intendance of the Force or its detached offices.

(10) In the event of this contract not being fulfilled by me, Gromoff, *i.e.*, if the stores are not delivered within the stipulated time, or if the camels required by the military authorities for the transport of artillery stores or troops' baggage are not forthcoming, the amount of the punishment will depend upon the will of General Skobeleff, Aide-de-Camp, the Temporary Commander of the Troops, to whose decision I am to submit.

(11) As no stamped paper is available, the tax upon this contract will be deducted when accounts are finally settled, and all papers issued by me, Gromoff, will be paid for according to the established tax.

(12) In all cases not here provided for, the rules of the military administration as regards contracts are to be taken as a guide.

(Sd.) KHOJAYEFF, *College Assessor,*
Acting Intendant, Trans-Caspian Field Force.

(Sd.) ALEXANDER YEGOROFF GROMOFF,
Merchant of the 1st Guild of Tashkand.

Confirmed by General Skobeleff, Aide-de-Camp, Temporary Commander
of the Troops, 18th (30th) October 1880.

APPENDIX LXIV.

GENERAL ORDER, TRANS-CASPIAN FIELD FORCE, No. 425, DATED KRÁSNOVODSK, 31ST OCTOBER (12TH NOVEMBER) 1880, CONCERNING THE INSPECTION OF THE GARRISONS OF KARÁJA-BÁTIR, YÁGLI-OLUM, AND CHÁT.

I have inspected the troops of the garrisons of Kárajá-Bátir, Yágli-Olum, and Chát, *viz.*, the 1st, 2nd, and 4th Companies of the 82nd (Daghistán) Regiment on the 27th, 28th, and 29th of this month (8th, 9th, and 10th November), and have found them in the following state:—

(1) *Garrison of Kárajá-Bátir, 1st Company Daghistán Regiment.*—The men have a fine and healthy appearance, and their bearing is good. The

manual exercise was well done, as also the aiming drill and shooting. The company drill and manœuvres carried out show that both officers and men have a good knowledge of their duties. The uniform, winter clothing, boots, arms, and entrenching tools were complete and in good order. The men's quarters were clean and in good order, and the rations were very good. There were four sick, who were getting on well. For the excellent condition of the 1st company of the Daghistán Regiment, it is my duty to give my hearty thanks to Captain Golovkoff, Commanding the Company, and I also thank Non-Commissioned-Officer Valintsinoff for his intelligent dispositions during the manœuvres.

(2) *Garrison of Yágli-Olum, 4th Company 82nd Daghistán Regiment.*—The men look well and cheerful, and their bearing and the manual exercise were very good. The company drill and manœuvres carried out show that the men understand their duties tolerably well, but at the attack of the fort I remarked that, on breaking into it, the men instead of at once rallying round their officers and non-commissioned officers dispersed over the place. I request commanding officers to pay special attention to this. The arms, uniform, winter clothing, boots, and entrenching tools were complete and in good order. The rations were very good, as also the bread. There were six sick, who were getting on well. For the good condition of the 4th company of the Daghistán Regiment, I have to express my hearty thanks to its Commander, Staff-Captain Zinevitch.

(3) *Garrison of Chdt, 2nd Company 82nd (Daghistán) Regiment.*—The men do not look altogether healthy. There are 34 men sick or "feeble." The clothing and equipment are not quite correct, and carelessly fitted. The entrenching tools are not in good order, and are badly fitted to the men. Generally speaking, this company did not appear to me to be in proper order, and I remarked that its Commander, Staff-Captain Davidoff, has an imperfect knowledge of his duty. I therefore direct the Commander of the Battalion, Major Pojároff, either personally or through his junior field officer to bring this company into perfect order for a winter campaign.

For the excellent condition in all respects of the 1st and 4th Companies of the 1st Battalion Daghistán Regiment, I owe thanks to the Commander of the Battalion, Major Pojároff. I also thank all officers and men of those companies.

APPENDIX LXVII.

RETURN OF THE CONTENTS OF THE DUZ-OLUM SUPPLY-DEPÔT, OF THE QUANTITY OF STORES AWAITING DESPATCH FROM IT TO THE ADVANCED POSTS, AND OF THE STORES DEFICIENT AND REQUIRING TO BE BROUGHT UP FROM CHIKISHLIAR.

Description of supplies.	On the 3rd (15th) November there were in the Duz-Olum supply-depôt.	Awaiting despatch to Tarsakan, Band-Hassan, and Khwāja-Kala.	There should be kept in the Duz-Olum supply-depôt.	Therefore * there must be brought up from Chikishliar.
Rye-flour	Cwt. 9,419·59	Cwt. 3,640	Cwt. 3,296	Cwt.
Biscuits	... 1,639·68	896	1,863·04	1,119·36
Buckwheat groats	... 2,719·47	1,008	1,056	.....
Rice groats	... 179·2	670·4	838·4	1,325·6
Ghee	... 52	104·64	138·88	141·52
Salt	... 306·12	209·664	216·96	120·504
Fruit acids	... 154·48	104·832	112	62·352
Tea	39·96	22·344	22·4	4·784
Sugar	... 151·64	201·6	224	273·96
Pepper	... 24	3·36	6·4	9·52
Laurel leaves	... 1·35	3·36	6·4	8·41
Cabbage for <i>kvass</i>	... ..	2,016	1,006·68	3,022·68
Barley and oats	... 15,667·76	5,069·76 6,400 to Bâmi.	12,160	7,962
Vinegar	Gallons. 81			
Spirits	... 302·4	594	675	966·6

952·64 cwt. of horse biscuits are available to replace hay.

* In the original some figures of this column agree with the 2nd and 3rd columns, *minus* the 1st; others do not, and that apparently without any rule. Presuming some mistake to be in the 4th column, I have made it agree with the others.—J. M. G.

APPENDIX LXVIII.

STRENGTH OF THE TROOPS OPERATING IN TRANS-CASPIA ON THE 1ST (13TH)
OCTOBER 1880.

Corps.	ON THE ROLLS.							ABSENT.						PRESENT IN THE RANKS.		
	Field Officers.	Company Officers.	Non-Commissioned Officers.	Musicians.	Rank and file.	Non-combatants.	Total.	ON DETACHMENT.		ON DUTY.		SICK.				
								Officers.	Men.	Officers.	Men.	Officers.	Men.	Officers.	Men.	
3rd Company 2nd Caucasus Sapper Battalion.	...	7	5	2	184	8	206	...	21	...	18	...	45	7	115	
3rd Battalion 81st (Apshehon) Regiment.	1	14	45	9	729	30	828	1	18	...	32	...	12	14	751	
4th Battalion 81st (Apshehon) Regiment.	1	14	45	8	490	25	583	2	47	...	15	...	54	13	452	
1st Battalion 82nd (Daghistan) Regiment.	2	13	47	35	731	32	800	3	50	...	79	...	84	12	632	
4th Battalion 82nd (Daghistan) Regiment.	2	12	34	9	418	19	494	1	45	...	20	...	40	13	375	
1st Battalion 83rd (Samur) Regiment	4	18	40	38	423	11	537	7	45	...	24	2	52	13	394	
3rd Battalion 83rd (Samur) Regiment	1	14	47	7	463	13	545	3	34	...	8	3	67	9	421	
1st Battalion 84th (Shirvan) Regiment.	4	17	50	46	764	37	918	8	101	...	...	...	32	13	659
3rd Battalion 84th (Shirvan) Regiment.	1	16	43	8	469	12	549	4	43	...	13	...	47	13	429	
1st Reserve Railway Battalion (2 companies).	...	11	42	6	452	22	533	1	21	...	10	...	29	10	462	
Krasnovodsk Local Battalion	...	2	17	61	9	854	56	999	1	84	...	69	1	65	17	771
Alexandrovsk Local Detachment	...	1	3	22	2	296	31	355	...	15	...	20	...	12	4	304
Field Telegraph Park	...	1	7	19	...	87	10	124	20	...	16	8	80
Heliographic Detachment	3	19	...	31	...	53	10	...	4	3	36
4th Battery 20th Brigade	...	1	7	9	5	308	14	344	40	1	30	7	206
6th Battery 21st Brigade	...	1	6	4	4	260	97	372	...	12	...	30	...	38	7	285
Naval Battery	2	2	...	38	1	43	10	...	4	2	27
Taman Cossack Regiment	...	3	24	57	15	791	24	914	1	8	...	86	2	31	24	762
Poltava Cossack Regiment (4 sotnias)	3	12	23	11	406	13	468	2	20	...	32	...	79	13	322	
Laba Cossack Regiment (2 sotnias)	1	5	17	6	230	...	259	...	17	...	12	...	33	6	191	
Total	..	29	222	631	220	8,427	455	9,984	34	671	...	539	9	774	208	7,734

APPENDIX LXIX.

LETTER FROM THE COMMANDER OF THE EXPEDITION TO GENERAL M. N. ANNENKOFF, COMMANDING THE LINES OF COMMUNICATION, No. 6527, DATED 10TH (22ND) OCTOBER 1880.

On leaving for the front, I think it my duty to once more call the attention of Your Excellency to the importance for the Expedition generally, and especially for the consolidation of our future successes, of preserving and as far as possible renewing the complement of the camels now on the Micháelovsk line and under your orders. There is, no doubt, that sick and weakly camels require specially chosen pasture grounds and good and abundant water, and no medical treatment is so good for them as abundance of good food.

There is good reason to believe that the advance of our troops into the heart of the Akhal-Tekke *oasis* will enable Your Excellency to make use of the rich pasture grounds of the steppe, confining yourself at first to the hitherto untouched environs of the Great Bákháns.

Afterwards, especially if the projected advance of the Turkistán troops to Igdi and Bámi is carried out, you will be able to feed tens of thousands of camels on the Uzboi near Jamála and Topiátan.

The principal danger with such a large number of camels as with men is that of their being too closely packed together. This is unavoidable in war, but it is always excessively ruinous, and that is why I look with such distrust to the result of concentrating such a large number of camels round Mulla-Kári. No veterinary precautions will save them.

In April 1871, under more favourable circumstances for the preservation of the health of the camels (there were 700 of them, their owners were in charge, and the grass had not been eaten up), we, without moving from the place or carrying a single *puł* up to Tásh-Arvat, lost 80 camels by the 10th (22nd) of May, simply because we crowded them at night and also when at pasture. At that time military necessities forced us to do this, for Taghma-Sirdár with 5,000 horse and 5,000 foot was threatening the Micháelovsk line, and the troops slept in their clothes and with arms in their hands. Now, however, the circumstances are altered, and therefore I cannot sufficiently impress upon Your Excellency the advisability of dividing the camels which are being allowed to rest into parties of at most 200 head, and of sending them out to pasture for a more or less prolonged time without returning to Mulla-Kári or in general to the Micháelovsk line. From the experience of past years, I would draw the attention of Your Excellency to the northern spurs of the Great Bákháns from the wells of Oglánli to those of Kosh-Agirli, and even to Danáta. There is also abundance of forage in the environs of Tásh-Arvat-Kala, and, when the rains come and renew the vegetation on the Dárja peninsula, I do not think it would be advisable for Your Excellency to send the camels further; but in any case I would advise you not to go to the south or east, but to seek for pasture grounds to the north of the Great Bákháns, even to the wells of Gezli-Ata and Turja. By thus dividing the camels into small parties, Your Excellency risks less, as a small body can only be carried off at a time, and the alarm will be given sufficiently early to take measures for the safety of the others.

If it is determined to separate our Government camels from the others during the period of rest, it will be necessary to pay particular attention to the local conditions and to the usual habits of the Turkumán robber-bands. With a party of camels, and especially with sickly ones, there need be no military

escort but only the camel-drivers, and the most trustworthy should be armed with rifles and cartridges, paying attention to the choice of men and to their rank in the tribe, which is of such importance here. It must also not be lost sight of that the more easy watering is made, the better will the condition of the camels be, and *vice versa*. In this respect, the streams at Tásh-Arvat-Kala and Kizil-Arvat are the ideal; the wells of Oglánli are very good, but those of Ushák are much less favorable. In any case, it must be insisted upon that the camel-drivers construct water-troughs near the wells, and that the inspecting officer should always find them full of water. Then only can you be certain that the camels are watered. I could give Your Excellency many other hints, but that would lead me too far, and therefore I prefer to recommend to your notice two persons who are well acquainted with the troublesome and complicated management of camels—*Yesaul* Tserenjálóff and the merchant Gromoff. The former, who is at Your Excellency's orders, may be very useful.

The second question, which must at once be decided practically by Your Excellency, is that of utilising the camels remaining to the best purpose in the rear.

I propose as a guiding principle that the camels should not be constantly employed at work, which they cannot perform without eventually interfering with their fitness for service. There is not a little of such work on the Micháelovsk line; and, without going into troublesome details, I must express my conviction that the experience of the immediate past will give us *all* hints and lessons.

The regular working of camel-convoys requires a plan to be strictly laid down, in which are stated the system of loading, the means of collecting, the order of march, and the arrangement of halts for resting and camping; and the times that are most favorable for the camels are least so for the troops.

The most rational decision upon such a question is that at halts for rest preference should be given to the necessities of the camels, but at halts for the night the necessities of the troops should be first considered. It is very dangerous to make camels march improperly loaded, and therefore special attention should be paid to the packing of stores in the supply-depôts, and to a sufficiency of ropes being available.

I request Your Excellency to push forward the Décauville Railway as the main line advances, so as to have the former running right up to Burma. As it is of such importance, I would ask you to order more rails, as also locomotives and rolling stock.

I think it also advantageous to call your attention to the carrying out of the plan for the transport of supplies during October, November, and December of this year, as only on these conditions can the advanced force act with certainty, and consequently with energy. Knowing by experience with what good-will Your Excellency has worked since the beginning of this expedition at everything which might tend to bring it to a successful end, I am convinced that you will perceive all the importance of keeping in the immediate future the largest possible number of serviceable camels on the Line of Communication, and looking after their equipment, for the 4,500 camels of the 3rd, 4th, and 5th convoys told off for the Army of Operations will be quickly reduced by war, notwithstanding all our exertions. Even with the most complete success in the winter, in early spring small columns will have to advance into the heart of the country to pacify it, or at least to make the pacified tribes submit to our administrative regulations. A sufficient number of well equipped camels will be required for this, and these in all probability will

only be available from the Line of Communication. For my part I cannot doubt that your clear sense and indefatigable energy will succeed in doing what has never before been done in our Central Asian wars, and that during the present expedition you will successfully preserve the Government camel transport, which is of such extreme importance, not only in the present state of our finances, but in a military and political sense.

(Sd.) M. SKOBELEFF.

APPENDIX LXX.

INSTRUCTIONS FOR THE COMMITTEE APPOINTED TO TAKE OVER WAGGONS.

(1) The committee is to take over from Captain Gvozdetzki at Baku 129 waggons with spare wheels and harness for 45 waggons. Of the 129 waggons, 20 have been ordered at Baku from the coachbuilder Bulgákoff; the remainder are to be bought ready-made, or ordered at Elisavetpol.

(2) On taking over the waggons, special attention is to be paid to the good condition of the wheels and pipe-boxes, and they must be made of seasoned wood so that the spokes do not shake in their sockets; the tires are to be perfectly serviceable, of the usual thickness, and securely fastened by bolts to the felloes.

(3) The axles are to be of iron and strong. The pipe-boxes are to be so fitted to the axletree-arms that the wheels do not shake. The linch-pins are to be thoroughly serviceable, and the screws and nuts at the ends of the arms are to be strong and not worn.

(4) The perches of the waggons are to be of sufficiently thick oak or line wood, and must have no knots.

(5) The bodies of the waggons are to be strong, with uprights and gratings of the *Molokáni* pattern.

(6) The arches for stretching a tarpaulin are to be strong, not split, and of sufficient height. The waggons may, however, be taken without arches.

(7) The poles of the waggons are to be of proper length, and must not shake when the waggons are in motion. The ends through which the pole-bolts pass are to be shod with iron.

(8) The splinter-bars are not to be bent, and are to be fastened with iron.

(9) All iron rings on the waggons are to be firmly screwed into their places.

(10) The *lushni* (arches uniting the bodies of the waggons to the axletree-arms) are to be strong, with unbroken ends, and with their lower parts strengthened with iron.

(11) Each waggon is to have a drag-shoe and chain and a grease-box.

(12) The breechings on the poles are to be iron chains.

(13) The harness is to be new and of good unburnt leather. The traces need not be of leather, but may be of rope; but they must be strong. The bridles and reins must also be strong and of leather; but the ends of the reins may be of rope.

(14) The pads of the collars are to be of leather, and the straps for them must be strong.

(15) The waggons may be taken over a few at a time, and on the receipt of each batch by the committee, a form of proceedings is to be drawn up and signed by the president and members.

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(4) The perches of the waggons are to be of sufficiently thick oak or line wood, and must have no knots.

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(8) The splinter-bars are not to be bent, and are to be fastened with iron.

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(12) The breechings on the poles are to be iron chains.

(13) The harness is to be new and of good unburnt leather. The traces need not be of leather, but may be of rope; but they must be strong. The bridles and reins must also be strong and of leather; but the ends of the reins may be of rope.

(14) The pads of the collars are to be of leather, and the straps for them must be strong.

(15) The waggons may be taken over a few at a time, and on the receipt of each batch by the committee, a form of proceedings is to be drawn up and signed by the president and members.

In the memorandum to Colonel Kishinski,* it was stated that the above instructions could only be applicable to newly-made waggons. As, however, Captain Gvozdetzki had, in view of the urgency of the matter, been ordered to purchase used waggons also, paragraphs 2, 3, and 13 only were to apply to such, and the remainder were replaced by the condition that the woodwork of the waggons should be sufficiently strong and not split or broken, and that the iron work, both screws and fastenings, should be in good condition. If there were deficiencies in the screws and nuts, they were to be made good by Captain Gvozdetzki, under the orders of the committee. In addition, the committee were to inspect all wheels, including the spare ones, and satisfy themselves that they were fitted to the waggons and axletree-arms and had the necessary iron-work and pipe-boxes.

APPENDIX LXXI.

INSTRUCTIONS FROM GENERAL SKOBELEFF, AIDE-DE-CAMP, TO MAJOR-GENERAL BRONEVSKI, No. 7588, DATED 15TH (27TH) NOVEMBER 1880.

By General Order No. 455 Your Excellency has been appointed Commandant of the Atrak Line from Chikishliar to Bámi. The duties and rights of a Road Commandant are laid down in detail in the instructions approved of by His Imperial Highness the Commander-in-Chief of the Army of the Caucasus. Nevertheless, I think it necessary to inform Your Excellency of the general state of affairs on the line, and to direct your attention to a few points of special importance. From the plan for the provision of supplies to the advanced points between Duz-Olum and Bámi laid before you, and from the plan for the advance of the troops, you will see that by the 1st (13th) December Band-Hassan, Khwája-Kala, and Társakan will be furnished with their full proportion of supplies to last till the 1st (13th) July 1881, and that by the end of November the whole of the Atrak line will be held by companies of the Crimean and Stavropol Regiments, *i.e.*, it will be in its normal state. Chát, Yágli-Olum, and Karája-Bátir, will, however, hardly have their full quantity of supplies, and I request you to pay special attention to their being so provided. The merchant Gromoff is bound to carry supplies up to these points; but, if he does not furnish means of transport, I recommend you to send up the supplies in regimental waggons. It is desirable that the supply-depôt at Yágli-Olum should be filled up to the same extent as that at Khwája-Kala, so as to be able to supply troops on the march from it. In event of this being done, troops proceeding to the front would require hardly any train, as detachments could be supplied with provisions for two or three days at Chikishliar, Yágli-Olum, Duz-Olum, Khwája-Kala, and Bámi.

At Khwája-Kala and Yágli-Olum it is proposed to establish hospitals with 50 beds, and it is necessary to see to their being speedily formed and supplied with everything required. The 2nd section of the 2nd Temporary Field Hospital, which has remained at Duz-Olum, is supplied on a plan worked out by a special committee, by which food-stuffs are drawn from the supply-depôt, fire-wood is prepared by the troops, linen is washed by the hospital establishment,

lighting materials are bought by the Intendant, and the remaining articles in the category of material are obtained by an official of the Intendance, detached to the west coast of the Caspian. This plan of supply was adopted as it was impossible to find a proper contractor, and on account of the fabulous prices at which all food-stuffs required for the hospital stood. This system, however, requires constant supervision, so that there may be no insufficiency of stores, and Your Excellency should take especial care that no deficiencies are experienced in the hospital. All stores in the category of articles must be prepared in such proportions that half of them may be sent up to Bámi for the use of the hospital there, which is in the same position and is supplied by the same means as the hospital at Duz-Olum. I shall request Your Excellency to take upon yourself the duty of supplying both hospitals, as otherwise that at Bámi may be forgotten.

At all points of the line there are *kibítkas* for the use of the troops, but many of them are worn out, not in the wooden parts, but in the felts. Order all *kibítkas* to be inspected and the old felts separated from the serviceable ones, and have the latter sewn on to as many *kibítkas* as they will suffice for, taking new felts for the others from the Chikishliar and Duz-Olum stores depôts.

Distribute all the *kibítkas* among the posts according to their requirements, and give 20 extra ones to the hospital in Duz-Olum, so that all the hospital stores may be brought under cover. These *kibítkas* are to be told off for each telegraph station (one for an office, another for the officials, and a third for the men), except at Chikishliar, where the station is established in the house occupied by the Commandant, and at Duz-Olum, where it is in the house built for the Station Commandant. At these points *kibítkas* are not to be issued for the telegraph station.

At Chikishliar many *kibítkas* are in use in the hospital, because the huts are occupied by surgeons, superintendents, commissaries, priests, and their families. This must be put a stop to, and these people made to live in *kibítkas*, or one hut may be told off for the *personnel*. It is of special importance to prevent hospital buildings being turned into dwelling houses.

All *kibítkas* left over after the garrisons have been supplied are to be sent up to Bámi, where a large body of troops is collected. If there are not enough *kibítkas*, mud huts must be made; and, except at Karája-Bátir and Chikishliar, means will be available for their construction. At these points, the troops must be placed in *kibítkas*.

The transport on the Atrak line consists of the regimental waggons and company carts of the 1st and 2nd Battalions of the Crimean and the 4th of the Stavropol Regiment, and of 50 *arabas* hired from the Cossack Sansiyeff. All the extraordinary requirements of the garrisons of the forts and of the advanced force must be met by these waggons, and there cannot be many stores to be transported now, as all points up to Duz-Olum inclusive have been fully supplied. The only thing that may be wanted are cabbages for *kudsa*. I request that Your Excellency will take care that this vegetable is supplied, especially at Bámi, and I once more repeat that it should be transported by Gromoff, and that only in case of extreme necessity is it to be carried in regimental waggons or in Sansiyeff's *arabas*. At each fort there are two *arabas* for the parcels post, by which all money, letters, or registered letters are to be sent along with detachments on the march. The mail is carried up three times a week by *Jigits* stationed at each post on the Atrak line. I request Your Excellency to prevent these *Jigits* being sent out on days other

than those on which the mail passes to avoid wearing out the men, as all extraordinary orders can be sent by telegraph. No escorts must be allowed to be detailed to accompany officers or officials, but all should wait for camel-convoys or for detachments marching with the parcels' post. No *arabas* or other means of transport must be given to such officers to carry their baggage, as all who receive marching money must provide their own transport.

The removal of the sick from Bámi is to be carried out on the one-horse carts in the divisional hospitals and on Sansiyeff's *arabas*, which take stores up to Bámi and will carry the sick from all the hospitals on the Atrak line. Some of the sick may also be carried in the one-horse carts of the Red Cross Society.

Extraordinary expenditure may be incurred in carrying out all these manners,—as, for example, in supplying naphtha for heating and cooking purposes at Kárajá-Bátir and at Yágli-Olum, in buying materials for the workshops of the artificers of the wheeled transport set up at Társakan and Bámi, &c., &c. For such unforeseen expenditure, therefore, 10,000 *roubles* will be placed at your disposal, for which you will have to account.

The principal points on the Atrak line are Chikishliar, Yágli-Olum, Duz-Olum, and Khwája-Kala. The importance of the first is self-evident, but its position is such that it presents serious difficulties for a good defence, if the Trans-Atrak Turkumáns attacked it. All the other points are safe, but Chikishliar is in danger, and therefore I have left $3\frac{1}{2}$ companies there. I have asked for two guns to be sent thither from the west coast, and when these arrive, this place may be considered in safety. It is necessary, however, to encamp the troops near the hospital and supply-depôt, for otherwise a defence is hardly possible.

Yágli-Olum is of importance, because many roads unite there and cross the river; and therefore, besides a company, I have left there half a *sotnia* of Cossacks.

Duz-Olum, from its situation, cannot be attacked; and therefore, although it is the meeting point of main roads, I have only placed one company at it, which will suffice for all its requirements. As regards Khwája-Kala, the position of this post at a point where both our lines are united by the Kizil-Arvat defile, and from which a straight road runs by Nukhur to Durun, renders it very important, especially when the troops are assembled before Gok-Tapa. I have concentrated two companies here, so that they may form a sort of movable reserve to be moved in case of need on Band-Hassan, Társakan, or Nukhur.

As there is telegraphic communication between all the points of the line, I am certain that Your Excellency will be able to maintain order and quietness along it, and between Chikishliar and Band-Hassan, in spite of the small forces at your disposal.

Our relations with the Trans-Atrak Turkumáns were not very good in summer, and there were rumours of their being badly disposed towards us. The Gokláns tried to make some raids on our convoys in conjunction with the Tekkes; but now all this has ceased, although the Trans-Atrak tribes will not gravitate towards us completely till after the capture of Gok-Tapa. Nevertheless they require pasture grounds, and have asked permission to migrate to our bank of the Atrak. I, however, recommend Your Excellency to have no dealings with them till our affair with the Tekkes is settled, as, if they migrate to the vicinity of the Micháelovsk line, they may cause disorders upon it, and deliver over everything to the Tekkes.

APPENDICES TO CHAPTER XIV.

APPENDIX LXXII.

INSTRUCTIONS TO THE COMMANDANT OF FORT SÁMURSKOYE.

Fort Sámurskoye consists of :—(1) The Tekke *aul* of Yegyán-Bátir-Kala occupied by us and strengthened by the earthworks, lunettes Nos. I, II and III, at the salient angles of strong field profiles supporting one another and united by the mud walls of the *aul*, the whole forming a closed defensive work together with trenches and a work with towers at the south-west angle, and defending the place told off for unloading the camel convoys; (2) of the detached redoubt *A* on the hill to the south of the Tekke fort and containing the supply-depôts; and (3) of two redans, Nos. IV and V, on hillocks to the east and west of the redoubt *A*, supported by the fire at close range from the redoubt *A*, and the lunettes Nos. I and III, and also from the work with towers and the trenches defending the space told off for unloading the camel convoys. The interior of these redans is also searched from the redoubt *A*.

Both the redoubt *A* and the redans Nos. IV and V command from their hills the interior of the *aul*, but in its turn the hill occupied by redoubt *A* commands the hillocks on which redans Nos. IV and V are situated, and besides redoubt *A* commands the *karez* near it. From this it follows that the key of the position at Sámurskoye is redoubt *A*, which must in any case be held by us, even if redans Nos. IV and V are abandoned on account of insufficiency of troops, as the ground protected by the hillocks occupied by these redans is swept by fire from the main work and from the redoubt and need only be occupied by detached posts as a necessity against night attacks to prevent the enemy's skirmishers from occupying these hillocks at night and annoying the garrison of the post. Besides those, the work *B* on the road to Gok-Tapa to the east of our central works, is arranged for defence by rifle fire and by two mountain guns. If the garrison is insufficient, it may be abandoned, but its walls on the side nearest the main work must be destroyed so as to expose its interior to fire from that work, and to prevent the enemy from occupying it and annoying us.

The lunettes Nos. I, II and III are constructed for a section of infantry with one gun each; redoubt *A* is for one company and two guns, and the redans Nos. IV and V each for 20 men and 1 gun. The work with towers is to be held by 1 gun and the trenches by a company. The remaining three companies of infantry with a gun are to be kept in reserve in the centre of the main work, and are to have direct and immediate communication with each of the detached works. They are also to be covered from fire and are to take advantage of the cover afforded by the mud walls in the interior of the main work.

The lunettes of strong field profile at the salients of the main work may be considered free from escalade and their position, supporting one another as they do, should make an advance against the walls joining them very difficult.

The mud walls of the main work, where they are in good condition and sufficiently high, are bullet-proof, and protect well the men standing behind them. The walls must be repaired in places where they are broken down or very low.

The garrison of fort Sámurskoye is abundantly supplied with water, as the *karez* which carries water to it is under cross fire from the works and it is impossible to cut off the supply from it.

The general idea of the defence of this position should be to hold the key of the position,—the redoubt *A*. The possession of it prevents the enemy from firing on the interior of the work from a commanding position, and it should be defended to the last. The reduct, our last refuge in which our supply-depôts are placed, can very easily be adopted for defence by rifle fire and by artillery. If a banquette is made along its walls with bales, it can make a most obstinate defence, as it commands the ground all round. In addition to all that has been said above, it is important to clear the field of fire all round Sámurskoye from walls and other cover within rifle range.

Note.—Heliogram to the Commandant of Sámurskoye, No. 8705, dated 26th December 1880 (7th January 1881)—“As the garrison of Sámurskoye has been diminished, the supply-depôt and not the commanding redoubt must be considered the key of this post.”—(*Grodekoff*.)

APPENDIX LXXIII.

STRENGTH OF THE COLUMNS TOLD OFF TO STORM YANGI-KALA ON THE 20TH
DECEMBER 1880 (1ST JANUARY 1881).

I. <i>Column under Colonel Kuropátkin.</i>	II. <i>Column under Colonel Kozelkoff.</i>	III. <i>Main-Body.</i>
3 companies Turkistán Infantry ... 427 Detachment of Volunteers ... 112 1st Battalion Shírván Regiment ... 670 Sappers ... 15	Local Battalion ... 449 3rd Battalion Stavropol Regiment ... 741 Sappers ... 15 Sailors ... 7 Ossetians ... 20 Detachment of Volunteers ... 100	3 companies Daghistán Regiment ... 363 1st Battalion Sámur Regiment ... 351 3rd Battalion Sámur (3 companies) ... 246 3rd Battalion Shírván Regiment ... 480 4th Battalion Apsheron Regiment ... 395 ½ company of Sappers ... 80
Total ... 1,224	Total ... 1,332	Total ... 1,914
<i>Cavalry.</i> 2 sotnias of Cossacks ... 195		<i>Cavalry.</i> 15th Dragoons (2 squadrons) ... 272 1st and 3rd sotnias Taman Cossacks ... 208 2nd sotnia Poltava Cossacks ... 100 5th sotnia Laba Cossacks ... 100 2nd sotnia 1st Orenburg Cossacks ... 100 Total ... 780
Grand Total ...		
Bayonets ... 4,470 (36 companies).		
Sabres ... 975 (9 squadron and sotnias).		
Guns ... 52		
Rocket-troughs. ... 2		

19th (31st) December 1880.

(Sd.) GRODEKOFF, Major-General.

(Sd.) BARANOK, Captain, Senior Staff Officer.

APPENDIX LXXIV.

RETURN OF THE ORDINARY AND LINNEMANN ENTRENCHING TOOLS IN POSSESSION
OF THE TROOPS IN THE GARRISON OF SÁMURSKOYE.

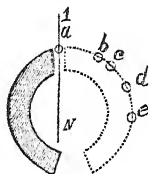
Corps.	LINNEMANN.		ORDINARY.			
	Spades.	Axes.	Shovels.	Pickaxes.	Hoes.	Axes.
3rd Battalion Stavropol Regiment	...	320	80	...	...	...
1st " Shirván "	...	320	80	40	...	12
3rd " " "	...	300	16	...	...	...
4th " Apsheron "	...	224	12	...	...	...
1st " Sámur "	...	320	16	20	...	12
3rd " " "	...	320	16	...	...	...
3 companies Turkistán Troops	44	...	16	61
Trans-Caspian Local Battalion	45	...	15	30
1 company 2nd Caucasus Sapper Battalion	60	5	7	21
Total	...	1,804	220	209	5	62
						112

APPENDICES TO CHAPTER XV.

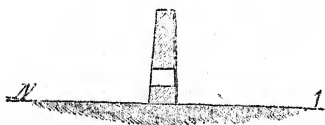
APPENDIX LXXV.

EXPERIMENTS CARRIED OUT BY THE 3RD COMPANY OF THE 2ND CAUCASUS SAPPER BATTALION AT SÁMURSKOYE.

The experiments carried out with dynamite and pyr-oxyline at Sámur-skoje, with the object of determining the suitability of these explosives for breaching mud walls, gave the following re-sults :—



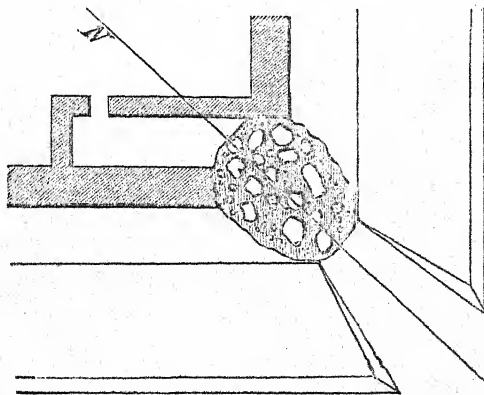
Thickness of wall, $2\frac{1}{2}$ feet.



A charge of 10 dynamite cartridges, weighing 2·25 lbs. and fastened at *a* on the wall of a round tower at $1\frac{1}{2}$ feet from the ground, made an opening 2 feet in diameter. After that, three charges, each of 12 dynamite cartridges and weighing 2·7 lbs., were placed round the base of the tower, *c* being at a distance of $1\frac{1}{2}$ feet from *b* and 3 feet from *d*. The charges were in continuous circuit. On the charge *b* being exploded, a breach 7 feet long was made in the wall, charge *c* burned itself out, but charge *d* did not ignite. On the latter being disconnected, placed at *e* in the centre of the part of the

wall still standing, and fired, it blew down the wall as far as the door.

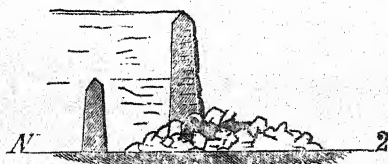
To breach a wall, two charges of 40 cartridges, each weighing 81 lbs.,* were placed at the base of the wall at 7 feet from the angle and buried $1\frac{1}{2}$ feet.



The charges were in divided circuit. They exploded simultaneously and produced a breach 5 feet high, 11 feet broad, and 14 feet long on the exterior and 5 on the interior side. The total mass of the part destroyed was estimated at 845 cubic feet.

For the experiments with pyr-oxyline, 3 mines were placed at 5 feet from the ground, weighing 1·8

lbs. each, and buried in the wall to a depth of $1' 8''$, the thickness of the wall at this point being $3' 7''$. On



* All the cartridges were not of the same weight.—*Author.*

being exploded they formed a breach 4' 6" broad and 3' 5" high outside, and 5' 6" broad and 5' 5" high inside. A crack was also made reaching to the top of the wall.

The remaining 7 dynamite cartridges were placed at 1' 6" from the ground and 3' from the left side of the breach and cut the wall half

Fig. 3. through in the manner shown in the profile *N. 5.* The feeble action of the dynamite was attributed to the pyroxyline having cracked the wall and the dynamite gas having escaped by this crack.

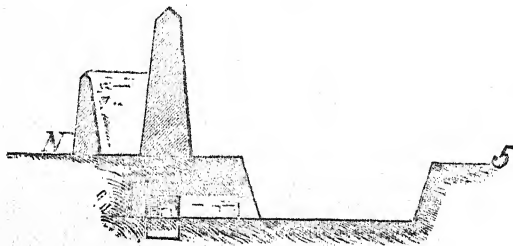
These experiments convinced every one of the unsuitability of dynamite for destroying mud walls, and it was therefore determined to use powder.

To determine how quickly mud walls could be mined through, two galleries

Fig. 4. were made 3' 6" high and 2' 6" broad. The thickness of the wall at the base of the gallery was 5' 3", at the top 4' 8". The wall was pierced in 1 hour and 20 minutes, and, if it be taken into consideration that the wall was open on the rear side, 1½ hours may be allowed.

Experiments were also made in driving underground galleries, and two

branches were driven from the bottom of a ditch at 25 feet apart. The soil was soft clay and easily worked with shovels. The galleries were made 13 feet long and were completed in 3 hours. From the extremities of the galleries side branches were driven 5 feet long and ending in powder chambers.



APPENDIX LXXVI.

MEMORANDUM BY LIEUTENANT-COLONEL RUTKOVSKI ON THE SANDBAGS AND OTHER *matériel* REQUIRED FOR THE SIEGE OF GOK-TAPA, No 97, DATED 14TH (26TH) SEPTEMBER 1880.

As no materials are to be had locally for the gabions and fascines required for the siege, I propose that they should be entirely replaced by sandbags. It would seem that about 40,000 will be required, which number is arrived at by the following calculation:—

For 100 guns placed in batteries, the total length of crest line including epaulements, will be 350 *sâjens*,* and, allowing a height of 3 feet for the parapet, the total surface of the interior slope will be 164 square *sâjens*. A square *sâjen* requires 20 sandbags,—total 3,280.

To form bonettes to cover the detachments, 300 *sâjens* in all, 3 feet high, formed by two rows of sandbags, will require 5,200 bags.

As it is proposed not torevet the interior slopes of the trenches, 3 sandbags are required for the protection of each man of the working party. Allowing the number of men in these parties to be equal to the number of

* A *sâjen* = 7 feet.—J. M. G.

entrenching tools available and suitable for work in such soil, *viz.*, 2,250 (1,500 shovels, 750 hoes and pickaxes), 6,750 sandbags will be required.

Besides, the chain of skirmishers sent to the front to cover the working parties will require about 3,000 bags, giving a total for the first parallel, not including the revetments of the interior slopes of the works on the flanks of the attack, which may also require to be revetted, of 18,230, or in round numbers 20,000 sandbags.

Supposing that we meet with an obstinate resistance, further works will have to be pushed up to the ditch and the craters of the mines will have to be crowned after the passage of the latter. It is therefore advisable to double the above number of sandbags, for even if we take the revetments from the batteries in rear after they are disarmed and use the sandbags for those in the advanced trenches, it must be remembered that even with the most careful handling they will not stand more than two removals.

If there are difficulties in the way of preparing the 40,000 sandbags which I ask for, and the bags and sacks in the Intendance dépôts have to be used, or if it is decided to dispense with revetments, it will still be necessary to have 10,000 to 15,000 sandbags in the engineer park exclusively for the formation of lodgments for riflemen and for the covering of the working parties at the beginning of the siege works, especially under close fire from the enemy.

I think the number of entrenching tools with the force quite sufficient compared with its strength, as has already been stated in the memorandum laid by me before His Excellency the Temporary Commander of the Troops last May before his departure for the occupation of the Atrak line.

The whole of the entrenching tools have now been landed at Chikishliar and received at Bámi with a few unimportant exceptions, and there have also been received at Bámi dynamite, Bickford's fuze and detonators, one dynamo-electric machine with Dreier's and Sháh-Nazaroff's fuzes (out of the three machines which I asked for in a telegram to the Commanding Engineer of the Caucasus Military District), 100 fuzes, and 6 mining borers for occupying craters under close hostile fire. The powder has been partly delivered and the rest is expected at Bámi.

Some other mining stores have not yet been delivered, such as 3,500 feet of isolated wire, a voltaic pile, Daniell's elements, and all minor stores.

In telegrams, dated 8th (20th) August and 12th (24th) September, I requested the Commanding Engineer of the Caucasus Military District to send them. Advice of the despatch of the mining materials has been received from the Staff of the Trans-Caspian Field Force, in letter No. 1171, dated 9th (21st) August.

(Sd.) RUTKOVSKI, *Lieutenant-Colonel.*

APPENDIX LXXVII.

INSTRUCTIONS TO THE TRENCH-MAJOR OF THE RIGHT ATTACK.

Major Bogayevski's duties are:—

- (1) He will stop all work in the trenches in the event of an attack by the enemy, and take command of the troops in the trenches on duty at the time of the attack.

- (2) He will organise the rifle fire against the enemy. The following points are to be noted :—

By day only the best shots are to fire singly, and the object to be fired at is invariably to be pointed out to them, such as gateways, walls near at hand, the wall of the fortress and single men on horseback and on foot.

Small bodies of the enemy are to be fired at by groups, or by sections. Volley fire and independent fire are to be used against large bodies of the enemy, and its intensity is to be increased as the enemy advances. Indirect fire by volleys may be used against the interior of the fortress, if information is sent from the observatories that such fire would create a panic. All measures should be taken to ensure the fire being precise, such as props being made for firing from, &c.

- (3) He will distribute the guard of the trenches so as best to cover the working parties.
- (4) He will watch over the regular execution of trench duties and reliefs. He will ascertain that all the men get cooked food daily, that cleanliness is observed, and that men only move by the covered communications within the sphere of fire. He will make arrangements for assistance being afforded to the wounded and for their being transported to the bandaging station.
- (5) The Trench-Major must always know the distribution and strength of the troops employed as working parties, and while, not interfering in technical details, he will take care that the strictest order is always observed. He will see that the work is carried on with quietness and order and that the men do not become lazy. If there is a field officer senior to the Trench-Major with the troops on duty in the trenches, orders from the latter to the troops must always be given through such officer.
- (6) All commanding officers of fresh infantry parties coming on duty into the trenches must, if they are junior to the Trench-Major, report the strength of their parties and the orders received to him.
- (7) The Trench-Major will send in a daily report, showing the troops which have been on duty as guard of the trenches or as working parties, their strength, the number of rounds of infantry and artillery ammunition expended, how many of those are in possession of the troops in camp at Yangi-Kala and in the trenches, the number of killed, wounded, and sick, and any extraordinary circumstances.
- (8) The Trench-Major will name temporary commanders of sections from the troops on duty to assist him in his work.
- (9) The Trench-Major must keep in constant communication with the Commander of the Artillery of the Attack and the Director of Works.

(Sd.) KUROPÁTKIN, *Colonel*.

APPENDIX LXXVIII.

APPROXIMATE NUMBER OF INHABITANTS IN DANGIL-TAPA.

According to an eye-sketch, Dangil-Tapa covers an area of 186,800 square *sajens*. If from those are deducted :—(1) the space occupied by the hill, 65 *sajens* in diameter = 3,200 square *sajens*; (2) the space occupied by the trench

7 *sázens* broad and 1,670 *sázens* in perimeter = 11,690 square *sázens*; (3) the avenues and open places on the bank of the stream and through the fortress counting two such avenues 5 *sázens* broad = 6,000 square *sázens*; and (4) the enclosures for camels, cattle, and horses, 10 in all, at 100 square *sázens* each = 1,000 square *sázens*,—in all, 21,600 square *sázens*, we have 166,000 square *sázens* covered with dwellings. Supposing that the *kibitkas* or huts in $2\frac{1}{2}$ *sázens* in diameter and stand 1 *sázen* apart, *i.e.*, each occupies 12 square *sázens*, there are in Dangil-Tapa $\frac{1,66,000}{12}$ = not less than 14,000 *kibitkas*.

Allowing 5 souls per *kibitka*, including women and children, this gives 70,000 souls, of whom 14,000 are men capable of bearing arms. As, however, the strength of the besieged has been increased by families being sent hither from the whole *oasis*, the population may number 100,000, with, counting the Marvli who have come without their families, 25—30,000 warriors.

APPENDIX LXXIX.

FORM FOR THE RECORD OF OBSERVATIONS FROM NO. 1 OBSERVATORY (VOLUNTEERS' KALA) TO BE REPORTED TO COLONEL KUROPÁTKIN, DATING FROM THE 3RD (15TH) JANUARY 1881.

3rd (15th) January.

3 to 3-30 a.m.—Fifteen men seen returning through north gates with forage. Single men in interior of fortress.

3-30 to 4 a.m.—Twenty-eight men and 1 camel returned with forage. About 25 men on foot entered by the north gate.

4 to 4-30 a.m.—Very little movement of single men in fortress.

4-30 to 5 a.m.—Shots from it seldom.

5 to 5-30 a.m.—Enemy increased fire from wall on camp and Grand Duke's Kala. The enemy's sharp shooters were driven away after 10-15 minutes by 3 rounds from the gun in the Turkistán Kala and the fire of our sharp shooters. As the volley firing began, about 10 men went out by the gate where the low traverse is.

5-30 to 6 a.m.—At 6 A.M. enemy began to fire volleys from south wall.

8-30 to 9 p.m.—A fire was seen on the north side of the fortress, music was heard, and then the cries of two men, which soon were silenced, but music continued for $1\frac{1}{2}$ hours.

10 p.m.—A fire seen opposite the observatory. Some talking. A few shots from the right flank.

10 to 11 p.m.—Silence and fires in 1st section, but great noise on north side. A shell fell and burst in a canal in 2nd section. No confusion among the enemy.

11 to 12 p.m.—Some shots from the left flank and opposite the Turkistán Kala. To the right of latter, at entrance No. 2, some lights moving in a ditch.

4th (16th) January.

Midnight to 1 a.m.—A few shots from the left flank and after them a voice crying out and the same cry from the north side which at once ceased. Cries evidently caused by our troops going too near and being observed.

1 to 2 a.m.—Some shots fired at our working parties on the dam, then complete silence, after which the enemy opened a sudden fire from the wall on our Volunteers in front of the dam. Enemy collected along the wall. From extreme angle of north front a gun was fired, the shell falling between the Volunteers' and Grand Duke's Kalas at 40 *sájeus* from the *kibitkas* in our camp.

2 to 3 a.m.—Enemy's fire became less frequent, and two rounds were fired from the gun in the same direction as the first. Some fires seen near the hill on the right side.

The shells bursting at that place produced no apparent confusion.

3 to 4 a.m.—Few shots fired, and those mostly against the Turkistán Kala. Then the enemy fired two rounds from his gun. The shells fell in the Volunteers' Kala and were better directed than before. The second fell in the watch-tower and burst in the trench.

4 to 5 a.m.—Enemy fired 5 rounds in same direction as before. Shells did not burst. Firing ceased and the fires went out. No noise or talking.

5 to 6 a.m.—Nothing unusual remarked.

6 to 7 a.m.—A few shots and some talking in section No. 2.

7 to 8 a.m.—Some movement noted on north face.

8 to 9 a.m.—Enemy moved to opposite wall on which some small bodies were posted.

9 to 10 a.m.—A few men descended into the ditch and began to fire from it. Increased movement inside the fortress.

10 to 11 a.m.—About 11 men descended into the ditch opposite the Turkistán Kala. Sixty mounted men trotted out into the desert, as also a few bodies of 7 or 8 men.

People were crowding on the north side.

11 to 12 noon.—Small bodies began to collect on the left.

12 noon to 1 p.m.—On the opposite (west) side from 300 to 400 men were gathered in large bodies, both on the wall and on the hill, and there were a few smaller knots of 15—40 men. Apparently consultations were going on.

Since 11 a.m.—About 20 men had gone out from the north-east face and had returned again towards the fortress and gathered together about 100 paces from it.

1 to 2 p.m.—Forty horsemen returned by the north gate. The crowds began to diminish. Seventeen men left the *aul* on foot. Eighty head of cattle were driven out to 60 *sájeus* from the fortress.

2 to 3 p.m.—About 200 of the enemy gathered at the north gate.

3 to 4 p.m.—On the hillocks, between sections Nos. 2 and 3, tolerably large bodies assembled, in all about 150 men, most of whom sat down. Increased gathering of men at north gate. Flocks were driven out from the *aul*, and four camels with loads. Twenty men were with them on foot. The men who had collected round the fortress descended into the ditch.

4 to 5 p.m.—The crowds on the hillocks diminished. Smoke rose from fires lighted evidently inside the *kibitkas*. The number of people in the open spaces in front of the *kibitkas* became smaller, and, from time to time, men ran about among the *kibitkas*. In the 3rd section this was not noticed, as the *kibitkas* stood closer together in it, and fewer people were seen. Some movement was seen at the right traverse and about 50 men descended one by one into the ditch, two remaining as sentries. A few men walked about quite exposed to view. Smoke noticed all over the right flank, probably caused by cooking fires.

6 to 8 p.m.—The enemy fired a cannon-ball which did not reach the camp but fell in open ground 300 paces from it. About $\frac{1}{4}$ hour afterwards a second shot was fired from the same angle of the trenches and in the same direction; a third followed, and then with cries of "Allah" the enemy rushed out of a ditch. During the firing, cries of "Do not retire! Forwards! All will be ours!" were heard mostly from the right flank. Many people shouted from the interior of the fortress to encourage those making the sortie. On firing ceasing, the enemy from the ditch began to collect on the left, and a tolerably large body of cavalry left the fortress at the angle on the right. From the second traverse, men were seen to descend to gather in the bodies lying round the fortress.

5th (17th) January.

3 to 4 a.m.—The fires gradually died out and movement inside the fortress ceased. Some palisades were let down into the ditch from near the second traverse, where about 18 Tekkes were assembled.

4 to 5 a.m.—Some work was being carried on in the northern part of the fortress, a crowd of men being engaged in throwing up a mound.

5 to 6 a.m.—Four men noticed moving about in the small trench No. 2, who were digging, as far as could be seen. No fires remarked.

6 to 7 a.m.—From the abovementioned place, 7 men gradually advanced into the ditch to the north. Some voices were heard calling out. Fires were lighted in the southern part and afterwards in the northern. A large number of fires and some movement in the north-western part of the fortress.

7 to 8 a.m.—A large trench was made from the north-east angle of the fortress. From the north side, 8 horsemen rode out into the sands.

8 to 9 a.m.—Three rounds were fired from a gun at our watch-tower; two fell a little to the right and one fell short. About 60 horsemen moved out into the sands. From the northern face, a mass of the enemy descended into the ditch. What looked like a caravan with 40 men was seen moving off into the desert. About 40 horsemen left by the north gate and moved into the desert. Another shot from the gun flew over our heads and fell 20 *sâjens* behind us. About 100 men on foot moved out into the desert.

9 to 10 a.m.—Two shots fired from the gun,—one flew over our heads, the other fell in front of the east face of the Grand Duke's Kala, and was evidently directed at some guns moving thither.

10 to 11 a.m.—Small groups and single men of the enemy began to move off into the desert. About 20 men were seen in the ditch on the right flank of the enemy's gun.

11 to 12 noon.—No movement inside the fortress. Some people sitting on the hillocks, about 500 in all. Fifteen men in the ditch round the gun. The movement into the desert continued.

12 noon to 3 p.m.—A large number of men on foot moved into the desert, also some horsemen with led horses. Ten men on foot and two on horseback returned singly to the fortress. A few men appeared on the wall in front of No. 1 post and killed some of our soldiers in the trenches.

3 to 4 p.m.—A few people showed themselves in the spaces round the *kibitkas* and on the wall opposite the post and the Turkistán Kala, and fired independently. The movement into the desert diminished.

4 to 5 p.m.—Some men showed themselves in the ditch opposite the Turkistán Kala, and 15 men in the ditch to the right of the gun. The firing increased a little. One man in the trench near the dam was wounded.

5 to 7 p.m.—Slightly increased movement in the ditches on the right, and 6 horsemen returned from the desert.

7 to 8-30 p.m.—Cries and movement from the north side. Light seen on the west face. Firing from the ditch and the wall. The enemy made some disturbance, then all was still. Evidently there were quarrels and disputes going on among them.

8-30 to 9 p.m.—Four shots were fired from the gun, and a small fire was seen on the east of the right flank.

9 to 10 p.m.—Two shots were fired from the gun, and cries were heard as if men were assembling on the north-east side, and were at once moved to the south against our left.

10 to 11 p.m.—Slight movement and some voices in the 2nd section close to the wall.

Station No. 1.—4th (16th) January 1881.

<i>Arrived in the fortress.</i>					<i>Left the fortress.</i>			
Hour.	Men.	Horses.	Sheep.	Camels.	Hour.	Men.	Horses.	Camels.
1-2 P.M.	40	40	...	...	11 A.M. from N. E. face.	90	60	...
3-4 P.M.	20	...	160	4	1-2 A.M.	17	...	...

5th (17th) January.

8-9 A.M. from N. E. face.	60	60	...
	40	40	...
	40	40	...
	30	...	...
	80	...	...
	40	...	...
	40	40	...
	112	2	...
	15	7	...
	200	120	6

6th (18th) January.

7 to 8 a.m.—Slight movement noted in the ditch. Men passing from the left flank into it.

8 to 9 a.m.—
9 to 10 a.m.—
} Movement into the ditch continued.

10 to 11 a.m.—Six horsemen arrived at the north gate from the desert.

11 to 2 a.m.—About 300 men descended into the ditch.

2 to 3 p.m.—Six rounds fired from the gun.

3 to 4 p.m.—Large gathering of men on the hillocks, about 300 to 400 in all in groups.

5 to 6 p.m.—Cries were heard and some movement noted on the north-east face.

6 to 7 p.m.—Talking on the left flank. The enemy opened fire and then rushed out against our left flank, but were driven back by a few volleys. Their commanders tried to make them advance again, but they would not.

7 to 10 p.m.—Everything quiet. Quarrelling amongst the elders heard.
 10 to 12 p.m.—Cries of camels heard. Talking in the ditch opposite our right flank.

7th (19th) January.

Midnight to 2 a.m.—Some fires and talking in the 3rd section.
 2 to 4 a.m.—All quiet.
 4 to 5 a.m.—Gatherings of men and much movement heard in the 3rd section.
 5 to 6 a.m.—Two hundred men showed themselves in the ditch opposite our right flank and began to move into the fortress.

The observations were not written down during the day.

4 to 6 p.m.—Single men, some with arms, descended into the ditch round the left angle of the fortress. Five volleys fired from this angle. About 50 horsemen came in by the north gate with several pack horses.

8th (20th) January.

6 to 8 a.m.—About 60 men descended into the ditch. Fires seen on the left flank, and some firing on the line of the north hill and right flank kala, where the gardens are.

8 to 9 a.m.—Gatherings of men in the northern section and signals given by beacons.

10 to 11 a.m.—Works being carried on in the breach where a heavy fire was opened on our men.

11 a.m. to 1 p.m.—Men were heard assembling and orders to march were given.

2-30 to 4 p.m.—(1) A mortar shell fell in the 2nd section opposite the kala.

7 p.m.—(2) Mortar shell fell in 2nd section and burst to the right of the kala.

- (3) Mortar shell burst on the open space.
- (4) Shell from a gun fell on the left of the breach.
- (5) Shell fell beyond the kala in the fortress without striking it.
- (6) Shell from a gun fell in the angle.
- (7—20) Shells from guns.
- (21) Shell from a mortar burst in the breach.
- (22) Shell from a gun.
- (23) Shell from a mortar fell to the left of the breach in the trench.
- (24—25) Shells from guns fell in the breach.
- (26) Mortar shell flew over the fortress from the left angle.
- (27) Shell from a gun fell in the breach.
- (28) Shell from a gun fell in the breach.
- (29) Shell from a mortar fell in the breach.
- (30) Shell from a mortar fell in the ditch opposite the Turkistán Kala.

9th (21st) January.

9 to 10 a.m.—Some rounds fired from the gun. No movement.

10 to 12 noon—Sixty horsemen moved into the desert.

12 noon to 2 p.m.—One hundred and twenty horsemen and 40 footmen moved into the desert.

2 to 4 p.m.—Sixty horsemen left the fortress. Some movement in the interior.

6 p.m.—Seventy men moved into the ditch opposite our right flank.

6 to 7 p.m.—Forty horsemen returned with forage.

7 to 8 p.m.—Noise heard from the north side and movement. Talking heard on the left flank and fires blazed up.

8 to 9 p.m.—Cries heard and orders given for men to march, but whither is not known. Others were urged to hurry on with their work.

10 to 11 p.m.—Firing increased, especially on the left. Movement into the ditch.

11 p.m.—The bursting of mortar shells in the north angle and east part produced great movement.

10th (22nd) January.

6 to 7 a.m.—No movement inside the fortress. Seven horsemen arrived with forage. *Kibitkas* were struck in the 2nd and 3rd sections.

7 to 8 a.m.—Some men descended into the ditch on the left, and apparently set to work there.

8 to 10 a.m.—Dust seen in the desert. About 60 horsemen left the fortress.

10 to 12 noon—Movement in the desert. Single mounted men were seen. Footmen were passing in and out of the fortress.

12 noon to 2 p.m.—One hundred men arrived.

2 to 4 p.m.—Two hundred men arrived from the desert in small parties.

4 to 6 p.m.—Twenty men went to the hill and concealed themselves among the *kibitkas*.

6 to 7 p.m.—Forty men descended into the ditch round the gun and 30 concealed themselves in the ditch round the tree.

The first part of the Diary of No. 1 station was lost during the storming of the fortress on the 12th (24th) January.

APPENDIX LXXX.

GENERAL SKOBELEFF'S INSTRUCTIONS TO COLONEL KUROPÁTKIN, DATED THE 30TH DECEMBER 1880 (11TH JANUARY 1881), 8-37 P.M.

During the night of the 30th and 31st December 1880 (11th and 12th January 1881), you have to establish yourself in the Grand Duke's Kala, and, if possible, on the dam in front of it.

To-night war rockets and two mountain guns will be sent to you. To keep down the small-arm fire of the enemy, to-morrow an attempt will be made to fire on the parapets of the main rampart from the south-east angle of the fortress as far as the level of the most northerly of the Grand Duke's Kala. You will watch the result and act accordingly. In addition, to-night and to-morrow mortar fire will be kept up on the south-east angle of the fortress.

Redoubt No. 1 will be abandoned and the communication between Redoubts Nos. 1 and 2 will not be occupied.

The troops of the right attack will, in addition to the Grand Duke's Kala, occupy the second parallel to the right of the Mortar Battery, as also the communication between the Grand Duke's Kala and the second parallel.

The two Turkistán *sotnias* are to be brought into camp and dismounted for work under your orders until they are in order for mounted service.

This night a squadron, a *sotnia*, and 2 heavy guns, under Colonel Prince Aristoff, will be posted near Redoubt No. 1, to support the right flank of the siege works and the Right Flank Kala. I add for your information that this night the troops of the left attack will construct a demi-parallel with a redoubt from the communication to the Grand Duke's Kala.

You are responsible for holding the Right Flank Kala.

At 11-45 P.M., *i.e.*, after the enemy's sortie was repulsed, the following note was added to these instructions, which were not sent off at 8-37 P.M.: "Continue the works as if nothing had occurred. They must be finished by dawn."

(Sd.) SKOBELEFT,

General and Aide-de-Camp.

TABLE OF THE ARTILLERY ARMAMENT OF THE SIEGE BATTERIES, REDO

Date.	Right Flank Kala.	Olga Kala.	Cavalry Kala.	Redoubt No. 1.	Battery No. 1.	Redoubt No. 2.	Battery No. 6.	Battery No. 2.	Turkistan Kala.	Grand Duke's Kala.
20th and 21st December (1st and 2nd January).	...	23-prs.	...	...	...	...	...	...	...	...
22nd December (3rd January).	24-prs. } 2 mitr. }	25	...	...	...	...	...	...	...	...
23rd December (4th January).	25	25	...	23-prs.	44-prs.	...	...	...	...	...
24th December (5th January).	25	25	...	...	34-prs.	23-prs.	...	...	...	...
25th December (6th January).	25	...	...	...	25	{14-pr. } {13-pr. }	43-prs.	...	...	...
26th December (7th January).	25	...	...	...	25	25	25	...	...	...
27th December (8th January).	25	...	1 Eng-strem.	20-prs.	25	25	25	318-lb. mortar.	...	...
28th December (9th January).	25	...	25	25	25	25	25	25	...	...
29th December (10th January).	25	...	25	25	25	25	...	25	23-prs.	{23-prs. } {2 mitr. }
30th December (11th January).	25	...	25	25	25	25	...	25	25	25
31st December (12th January).	25	...	25	...	25	25	...	618-lb. mortar.	25	25
1st (13th) January	25	...	25	...	...	...	...	25	25	25
2nd (14th) January	25	...	25	...	...	...	...	318-lb. mortar.	25	25
3rd (15th) January	25	...	25	...	...	...	...	25	25	25
4th (16th) January	25	...	25	...	...	...	...	25	25	25
5th (17th) January	25	...	25	...	...	24-prs.	...	25	25	25
6th (18th) January	25	...	25	...	...	25	...	25	25	25
7th (19th) January	25	...	25	...	...	25	...	...	25	25
8th (20th) January	25	...	25	...	...	25	...	...	25	25
9th (21st) January	24-prs.	...	25	...	...	25	...	...	25	25
10th (22nd) January.	29-prs. } 24-prs. }	...	25	...	...	25	...	...	...	2 mitr. }
11th (23rd) January.	25	...	25	...	...	...	...	...	...	25
12th (24th) January.	25	...	24-prs.	...	...	...	...	...	...	...

LXXXI.

UBIS, AND KALAS AT THE SIEGE OF THE FORTRESS OF DANGIL-TAPA.

Battery behind the Dam.	Battery near Grand Duke's Kala.	Opornoye.	Redoubt No. 3 and Slav-rope place-of-arms.	Battery No. 2.	Battery No. 4.	Battery No. 3.	Battery No. 7.	Breaching Battery.	Mortar Battery in front of Volunteers' Kala.	Battery near Battery No. 5.	Central Redoubt.
...	...	2 4-prs.	...	...	...	...	...	...	...	...	...
...	...	30	...	...	...	...	...	...	...	...	...
...	...	30	2 3-prs.	...	...	...	...	...	...	...	...
...	...	30	30	...	...	...	...	...	...	...	...
...	...	30	30	4 4-prs.	...	...	...	...	...	...	...
...	...	30	30	30	...	...	...	...	...	...	...
...	...	30	30	30	2 mitr.	3 6-prs.	...	...	...	...	...
...	...	30	30	30	30	30	...	...	...	...	...
...	...	30	30	30	...	30	...	...	...	...	...
...	...	30	30	30	...	30	...	...	...	...	...
...	...	30	30	30	...	30	...	...	...	...	...
...	...	30	30	30	...	30	...	...	...	...	...
...	...	30	30	30	...	30	...	...	...	...	...
...	1 3-pr.	30	{ 2 3-prs. 2 light }	30	...	30	{ 3 18-lb. mortar. }	...	...	...	...
...	30	2-light	2 light	30	...	{ 3 6-prs. 4 3-prs. }	30	...	...	...	...
...	30	30	{ 6 9-prs. 8 4-prs. 2 light }	...	...	...	30	...	...	...	4 3-prs.
...	30	30	30	...	...	...	30	...	...	...	30
...	30	30	30	...	...	...	30	...	...	...	30
...	30	30	30	...	...	...	6	...	10 18-lb. mortar.	...	30
...	30	30	{ 6 9-prs. 2 4-prs. 2-light }	...	...	...	60	6 4-prs.	30	...	30
...	30	30	30	...	...	...	30	30	30	...	30
3 3-prs. 1 mitr. }	...	30	{ 4 9-prs. 2 4-prs. 2 light }	30	30	30	...	30
30	...	30	30	30	30	30	4 4-prs.	30
30	{ 4 heavy 14 light }	30	{ 4 9-prs. 8 4-prs. }	30	30	...

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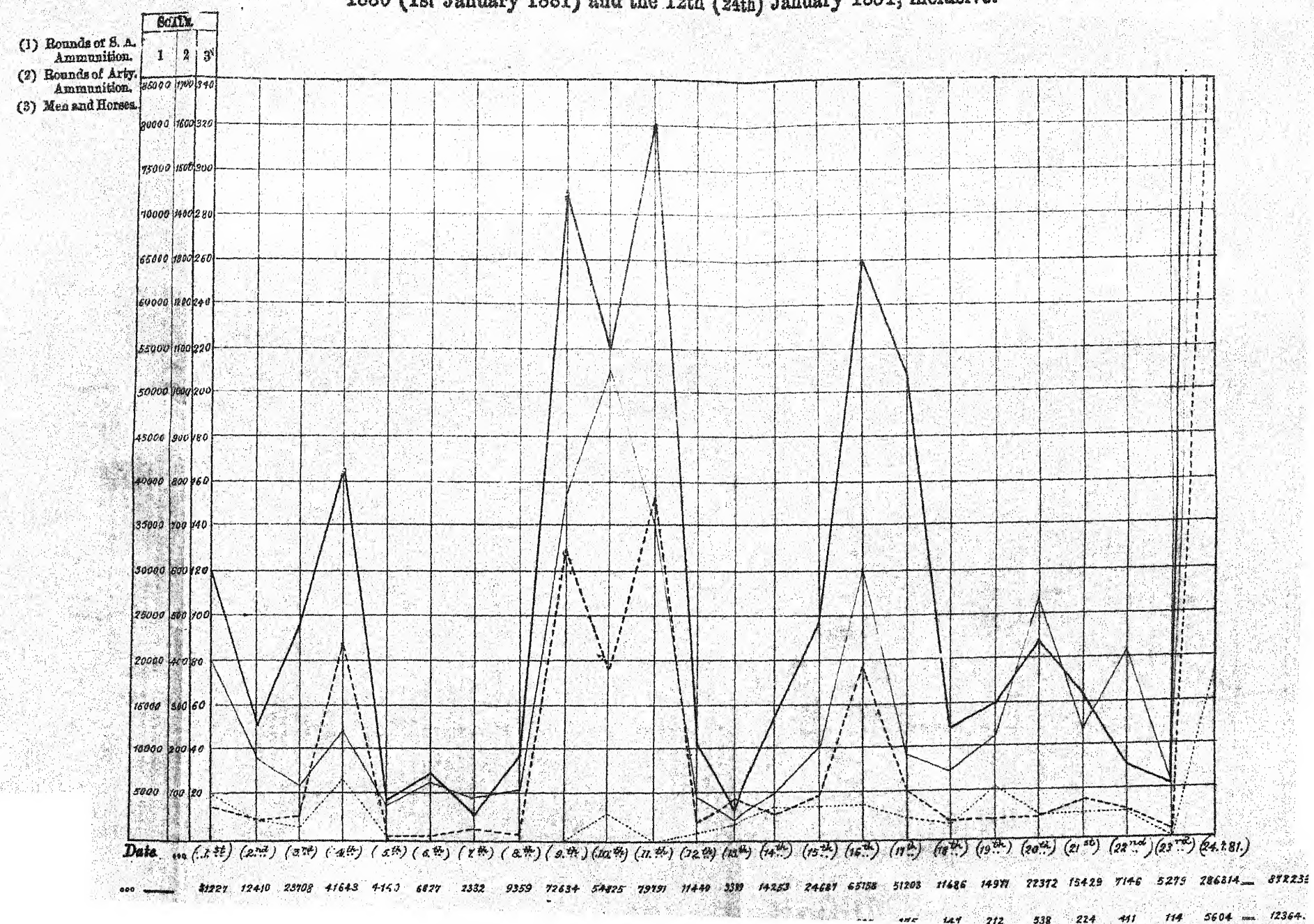
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Skobeleff's Campaign of 1880-1

V. 3.

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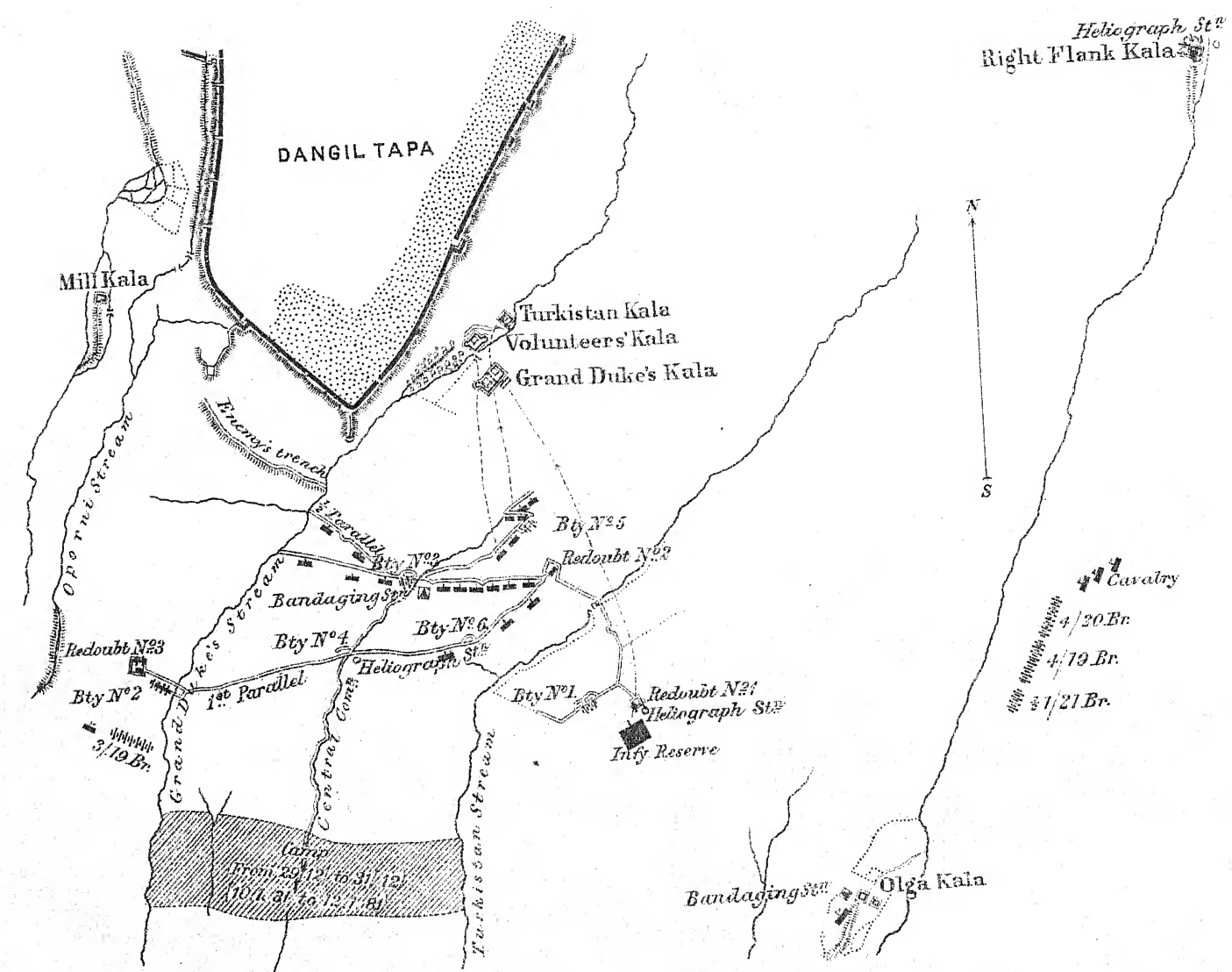
GRAPHIC TABLE

Showing the expenditure of ammunition and losses in the Field Force between the 20th December 1880 (1st January 1881) and the 12th (24th) January 1881, inclusive.



STORMING OF THE GRAND DUKE'S POSITION

29th December 1880 (10th January 1881).



APPENDIX LXVI.

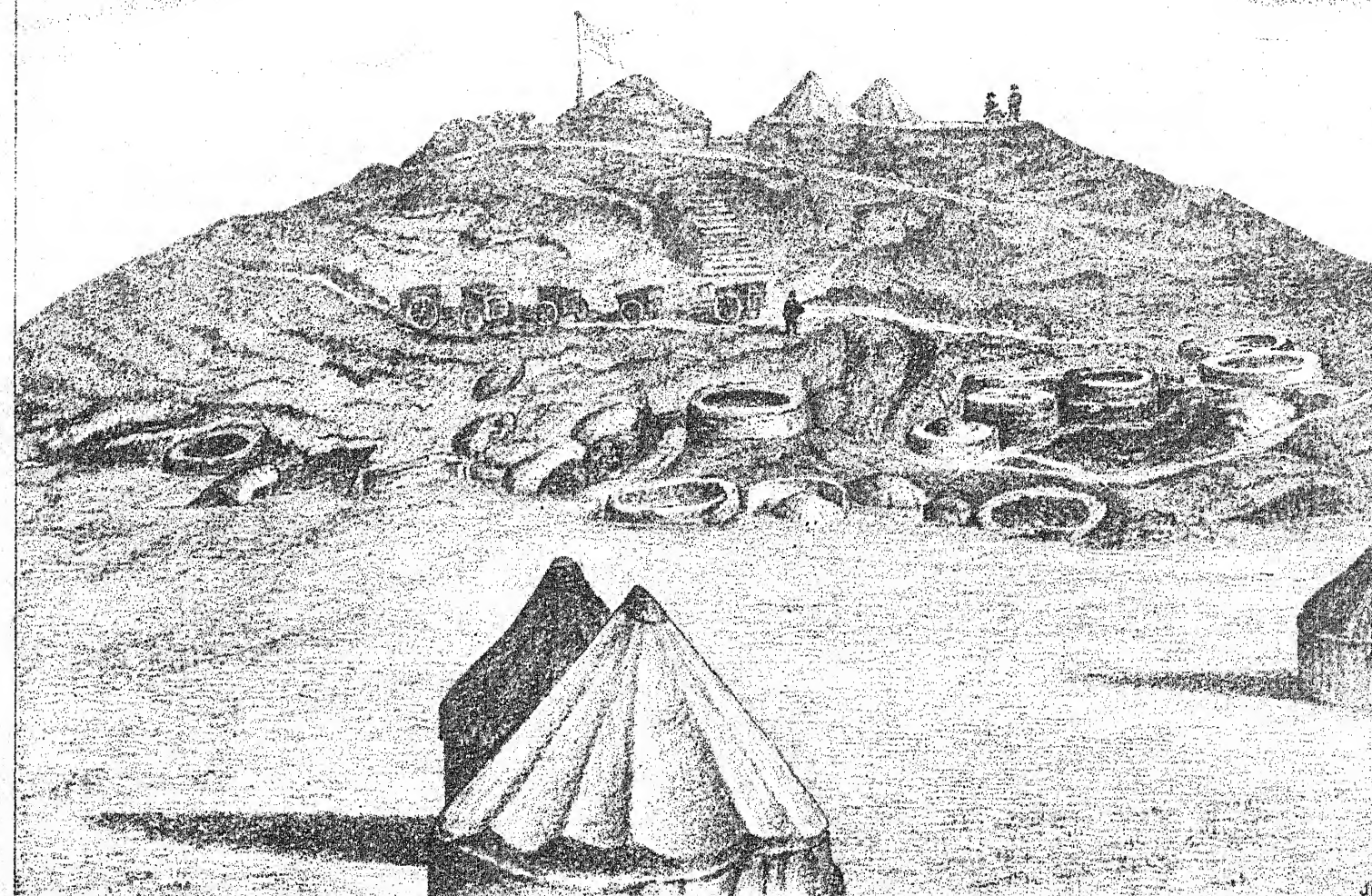
ORDER OF MOVEMENT OF THREE CAMEL CONVOYS FOR ONE JOURNEY TO BAMI WITH SUPPLIES, AND TO PROVISION BAND-HASSAN, KHWÁJA-KALA, AND TÁRSAKAN TILL 1st (13th) JULY 1881.

November.	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	Nov. 19th. Dec. 1st.	Nov. 20th. Dec. 2nd.	Nov. 21st. Dec. 3rd.	Nov. 22nd. Dec. 4th.	Nov. 23rd. Dec. 5th.	Nov. 24th. Dec. 6th.	Nov. 25th. Dec. 7th.	Nov. 26th. Dec. 8th.	Nov. 27th. Dec. 9th.	Nov. 28th. Dec. 10th.	Nov. 29th. Dec. 11th.	Nov. 30th. Dec. 12th.	1st (13th) December.
1st convoy, 1,200 camels ...	Bámi	Band-Hassan	Khwája-Kala		Márgis	Társakan	Bek-Tapa	D u z - O l u m																						
2nd convoy, 1,700 camels ...	Márgis	Khwája-Kala	Band-Hassan	Bámi	Band-Hassan	Khwája-Kala		Márgis	Társakan	Bek-Tapa	D u z - O l u m																			
3rd convoy, 700 camels ...	Társakan		Márgis	Khwája-Kala	Band-Hassan	Bámi	Band-Hassan	Khwája-Kala		Márgis	Társakan	Bek-Tapa	D u z - O l u m																	
1st convoy, 1,000 camels ...											Társakan	Márgis	Khwája-Kala	Band-Hassan	Khwája-Kala		Márgis	Társakan	Bek-Tapa	D u z - O l u m										
2nd convoy, 1,500 camels ...														Társakan	Márgis	Khwája-Kala	Társakan	Márgis	Társakan	Bek-Tapa	D u z - O l u m									
3rd convoy, 500 camels ...																			Khwája-Kala	Bek-Tapa	D u z - O l u m									
350 strong camels of 1st and 2nd convoys.																							Bek-Tapa	Társakan	Márgis	Khwája-Kala	Band-Hassan	Khwája-Kala		
1,500 of the best camels of the 1st and 2nd convoys.																								Társakan	Márgis	Khwája-Kala				
300 of the remaining camels of these convoys.																								Társakan	Bek-Tapa	Duz-Olum				
3rd convoy, 400 camels ...																										Társakan	Bek-Tapa	Duz-Olum		
3rd convoy, 400 camels (a second time).																													Társakan.	

Duz-Olum ;
The 3rd. (15th) November 1880. }

" Approved. "

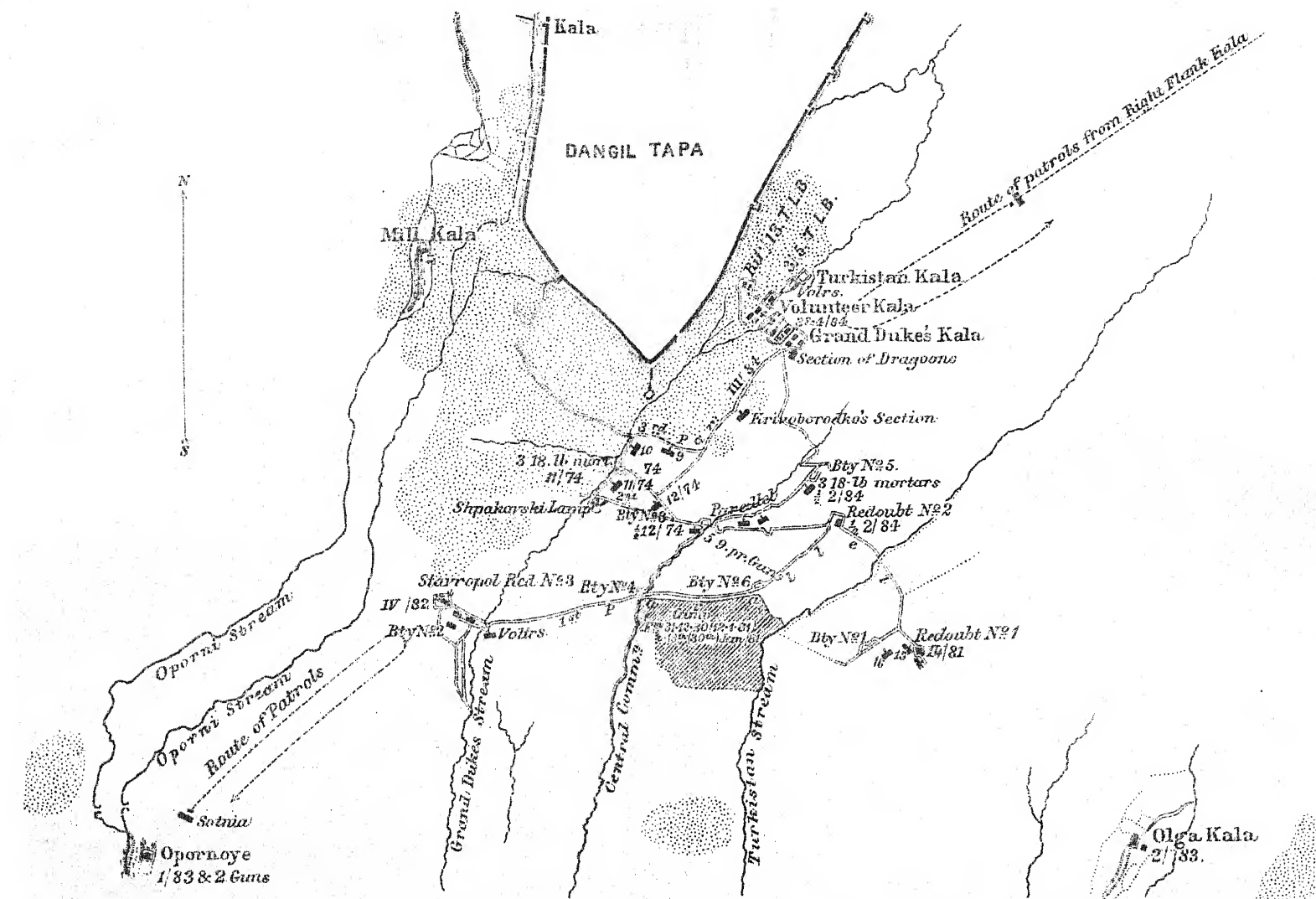
(Sd.) SKOBELLEFF,
General and Aide-de-Camp.



18
24.2.83

HILL OF DANGIL TAPA.


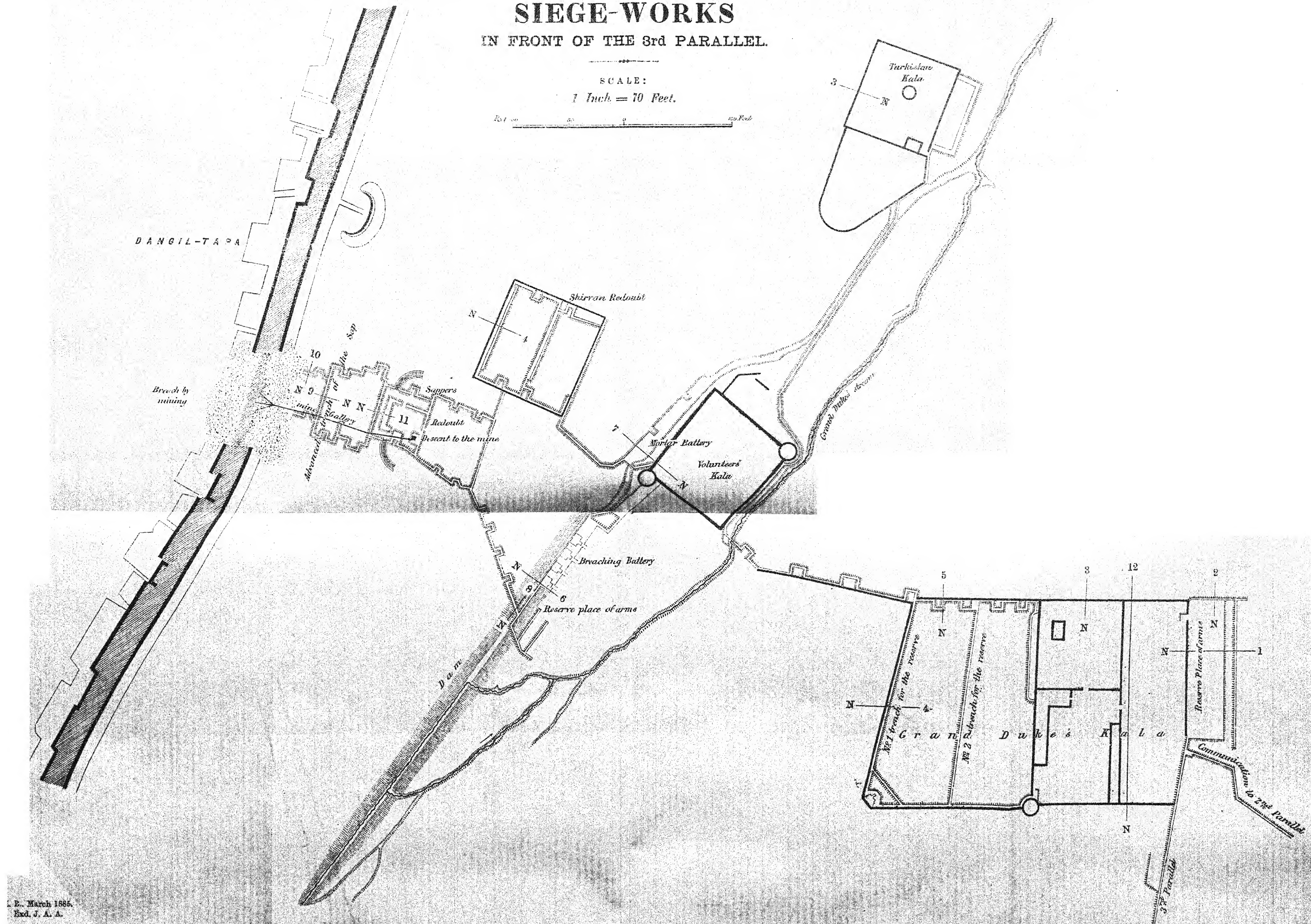
SORTIE OF THE 4TH (16TH) JANUARY 1881.



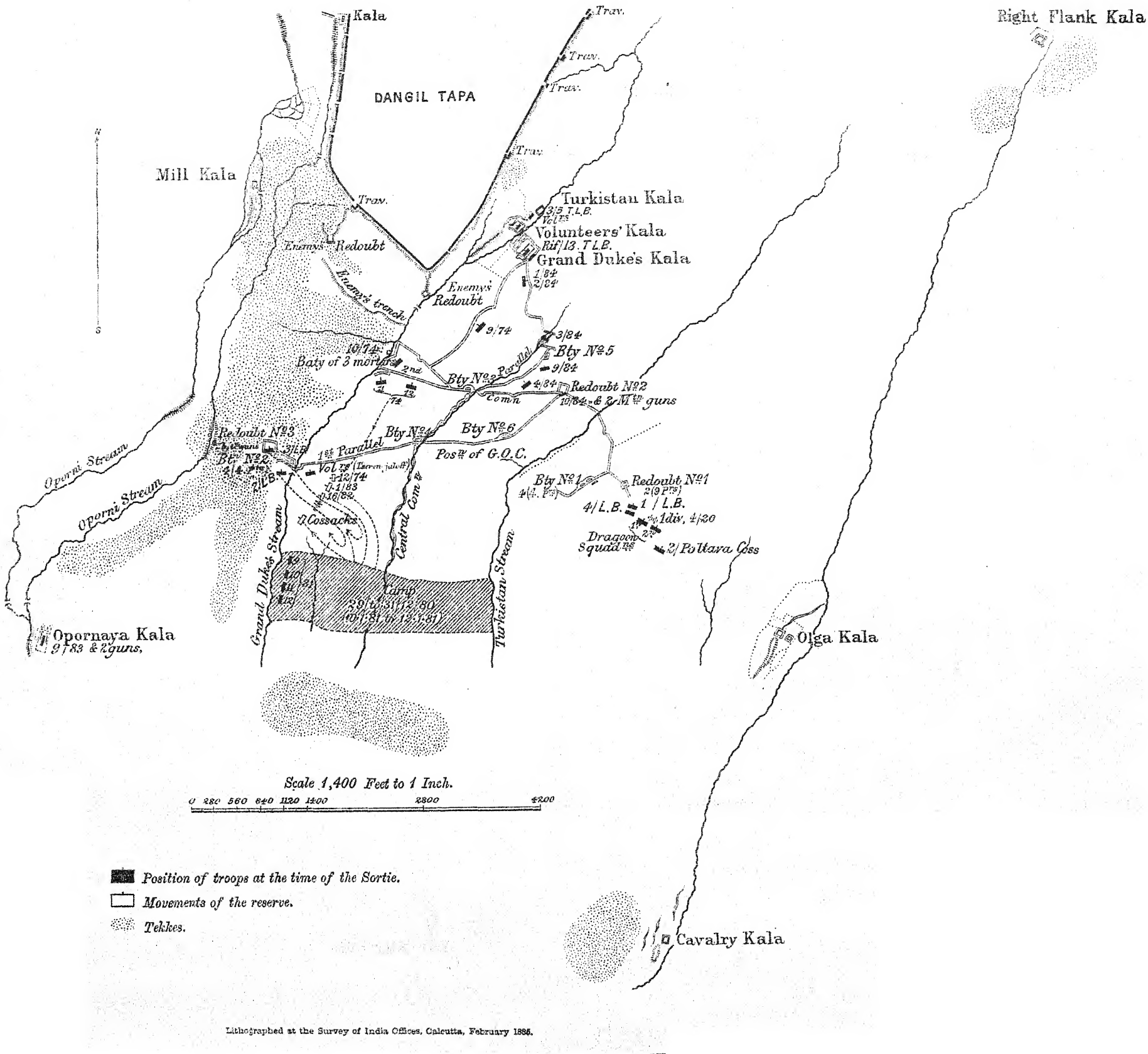
Lithographed at the Survey of India Office, Calcutta, February 1881.

PLAN
OF THE
SIEGE-WORKS
IN FRONT OF THE 3rd PARALLEL.

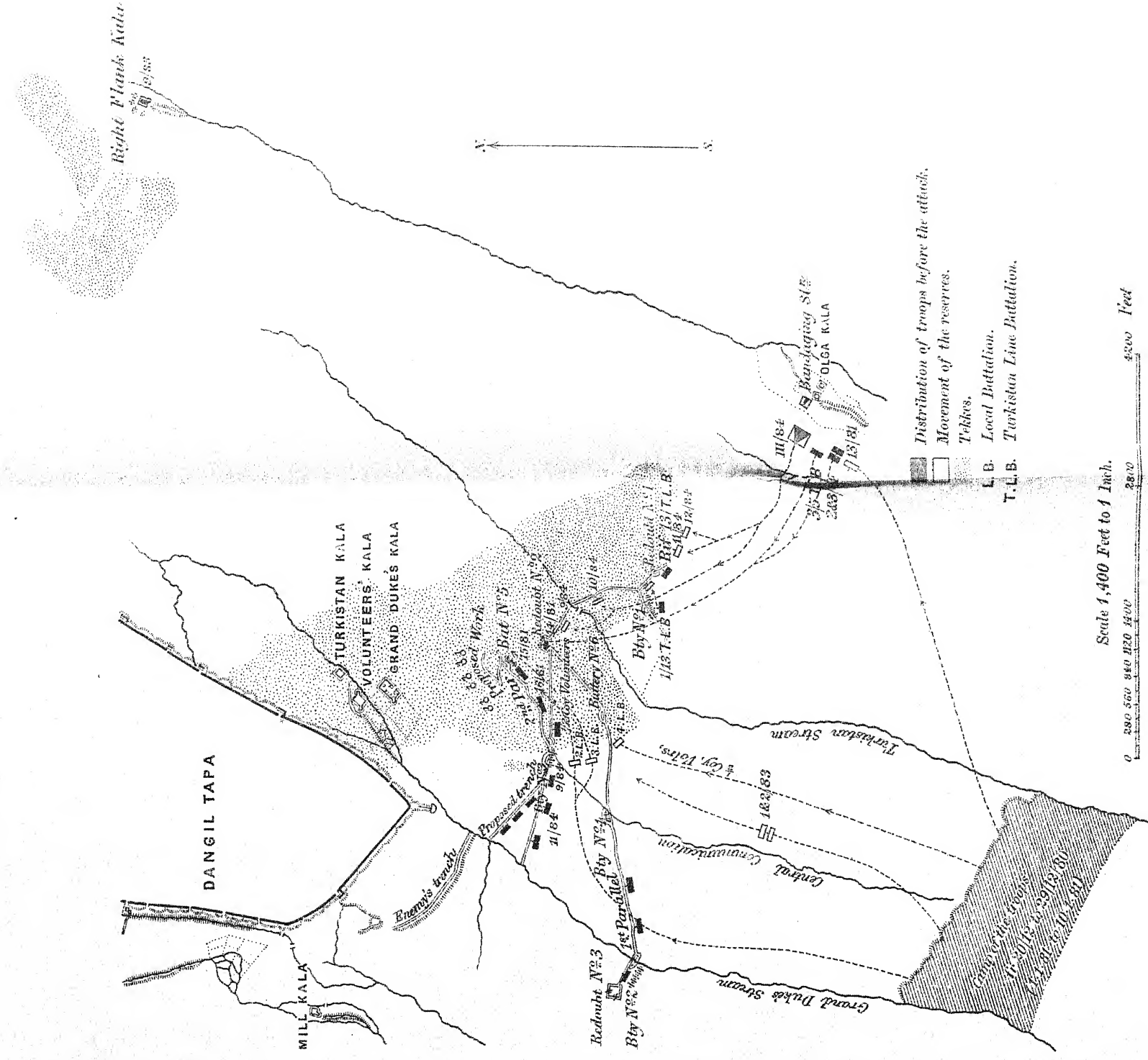
SCALE:
1 Inch = 70 Feet.

SORTIE OF THE 30TH DECEMBER 1880 (11TH JANUARY 1881).



TEKKE SORTIE OF THE 28TH DECEMBER 1880 (9TH JANUARY 1881).



Map supplied at the Survey of India Office, Calcutta, February 1881.